



US Army Corps
of Engineers
Waterways Experiment
Station

Technical Report EL-93-9
November 1993

AD-A275 414

①

Environmental Characterization for Target Acquisition

Report 2 Analysis of Thermal and Visible Imagery

by Bruce M. Sabol, Salvador Rivera, Jr.
Environmental Laboratory

DTIC
ELECTE
FEB 02 1994
S B D

Original contains color
plates: All DTIC reproductions
will be in black and
white.

Approved For Public Release; Distribution Is Unlimited

94 2 01 04 8

94-03224



Prepared for U.S. Army Aviation Applied Technology Directorate
and Headquarters, U.S. Army Corps of Engineers

The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products.

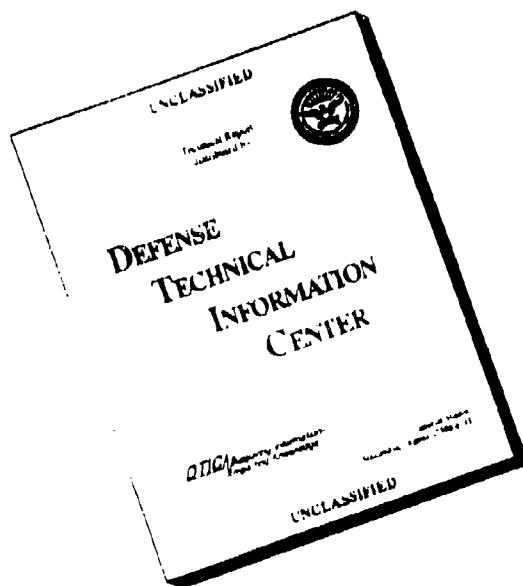


DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF COLOR PAGES WHICH DO NOT REPRODUCE LEGIBLY ON BLACK AND WHITE MICROFICHE.

DISCLAIMER NOTICE



THIS REPORT IS INCOMPLETE BUT IS THE BEST AVAILABLE COPY FURNISHED TO THE CENTER. THERE ARE MULTIPLE MISSING PAGES. ALL ATTEMPTS TO DATE TO OBTAIN THE MISSING PAGES HAVE BEEN UNSUCCESSFUL.

*Pages 31 thru 63
Figures 9 thru 18*

Environmental Characterization for Target Acquisition

Report 2 Analysis of Thermal and Visible Imagery

by Bruce M. Sabol, Salvador Rivera, Jr.
Environmental Laboratory

U.S. Army Corps of Engineers
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

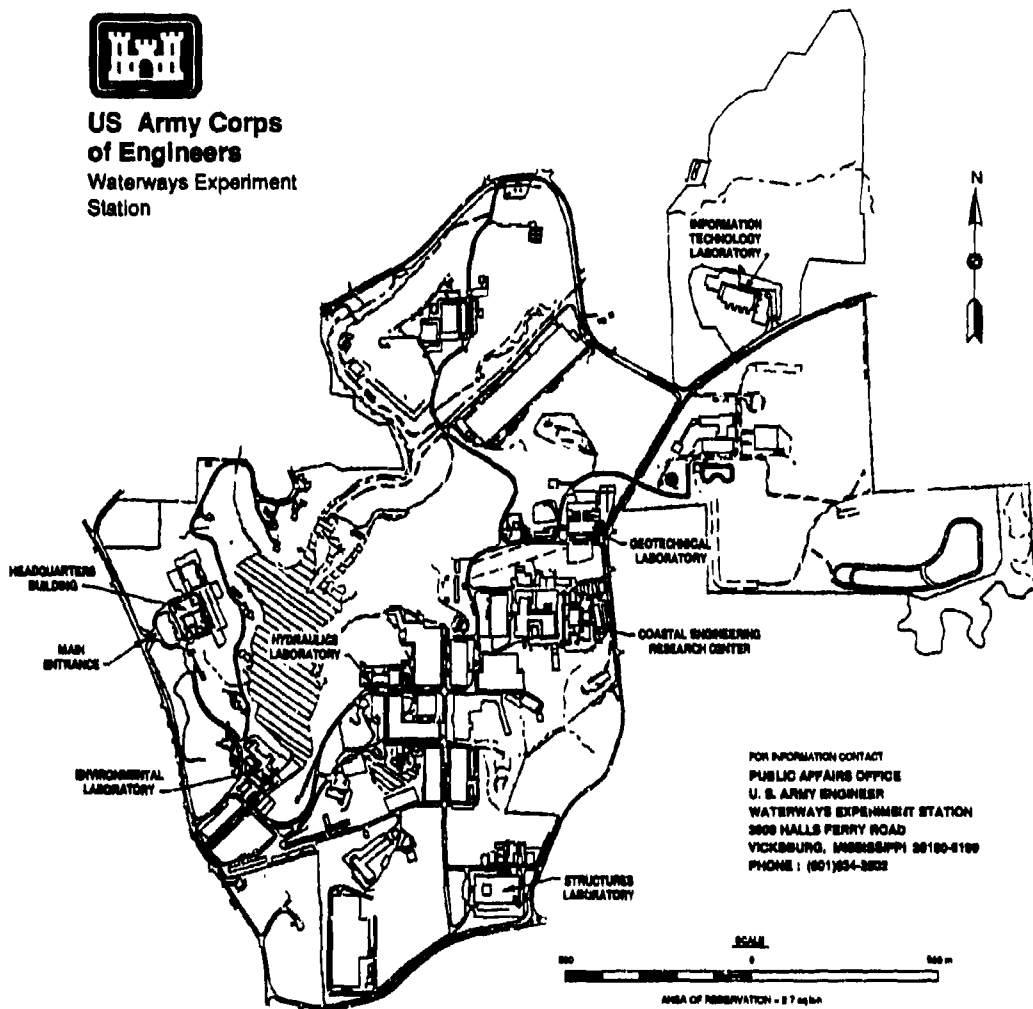
Report 2 of a series

Approved for public release; distribution is unlimited

Prepared for U.S. Army Aviation Applied Technology Directorate
Aviation Systems Command
Fort Eustis, VA 23604-5577
and U.S. Army Corps of Engineers
Washington, DC 20314-1000



**US Army Corps
of Engineers**
Waterways Experiment
Station



Waterways Experiment Station Cataloging-In-Publication Data

Sabol, Bruce M.

Environmental characterization for target acquisition. Report 2, Analysis of thermal and visible imagery / by Bruce M. Sabol, Salvador Rivera, Jr. ; prepared for U.S. Army Aviation Applied Technology Directorate, Aviation Systems Command and U.S. Army Corps of Engineers.

325 p. : ill. ; 28 cm. — (Technical report ; EL-93-9 rept. 2)

Includes bibliographical references.

1. Target acquisition — Remote sensing. 2. Infrared imaging — Military aspects. 3. Military topography — Remote sensing. 4. Remote sensing — Military aspects. I. Rivera, Salvador. II. United States. Army. Aviation Applied Technology Directorate. III. United States. Army. Corps of Engineers. IV. U.S. Army Engineer Waterways Experiment Station. V. Title. VI. Title: Analysis of visible and thermal imagery. VII. Series: Technical report (U.S. Army Engineer Waterways Experiment Station) ; EL-93-9 rept. 2.

TA7 W34 no.EL-93-9 rept.2

Contents

Preface	vi
1—Introduction	1
Background	1
Approach	2
Scope and Structure	2
2—Methodology	4
Data Collection Procedures	4
Image Metrics	8
Analysis Procedures	14
3—Results	21
Comparison of Ground-Truth Conditions and Image Metrics	21
Relationship Between Ground-Truth Variables and Image Metrics	55
4—Discussion and Summary	61
References	68
Appendix A: Metrics Image Processing Software Source Code	A1
Appendix B: Terrain Attribute and Scenario Data	B1
Appendix C: Meteorological and Radiometric Data	C1
Appendix D: Image Metrics Data	D1
Appendix E: Listing of PC-Based Program for Predicting Metric Class Values	E1

SF 298

Accession For	
NTIS ORNAT	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

List of Figures

Figure 1.	Overall methodology	5
Figure 2.	Range-dependent double window for measurement of target-sized contrast	14
Figure 3.	Typical binary tree structure generated by Cart	17
Figure 4.	Four classes of dependent variables	19
Figure 5.	Terrain class composition by scene and site	23
Figure 6.	Number of discrete terrain areas by scene at each site	25
Figure 7.	Total linear edges and edges between thermally dissimilar terrain classes by scene for each site	26
Figure 8.	Temporally varying meteorological and radiometric conditions by site for cool- weather excursions	27
Figure 9.	Temporally varying meteorological and radiometric conditions for warm-weather excursions	31
Figure 10.	Scatter plots of SD vs MEAN and SD vs CNT_95 for 8-12 μ band	39
Figure 11.	Scatter plots of SD vs MEAN and SD vs CNT_95 for visible imagery	41
Figure 12.	Temporal and scene-to-scene variation in thermal MEAN metric	43
Figure 13.	Temporal and scene-to-scene variation in thermal SD metric	45
Figure 14.	Temporal and scene-to-scene variation in thermal CNT_95 metric	47
Figure 15.	Temporal and scene-to-scene variation in visible MEAN metric	49
Figure 16.	Temporal and scene-to-scene variation in visible SD metric	51
Figure 17.	Temporal and scene-to-scene variation in visible CNT_95 metric	53
Figure 18.	Meteorological conditions for test day	63

List of Tables

Table 1.	Sampling Locations And Times	5
Table 2.	Imaging Equipment Specifications	6
Table 3.	Inventory of Imagery That Passed Quality Assurance and Calibration Tests	6
Table 4.	Meteorological and Radiometric Instrumentation	8
Table 5.	Ground-Truth (Independent) Variables Associated With Each Image	9
Table 6.	Image Metrics List and Description	15
Table 7.	Classification Trees Generated for Metrics SD and CNT_95 for Visible and 8-12 μ Waveband Imagery	20
Table 8.	Classification Tree Summary for Thermal SD and CNT_95	56
Table 9.	Summary of Classification Tree Results for SD and CNT_95	58
Table 10.	Summary of Classification Tree Generated to Predict Thermal and Visible Metrics Using Reduced Set of Ground-Truth Data	60
Table 11.	Predictions of Local Thermal Variability Using Decision Tree CCTALL04	66

Preface

The study reported herein was conducted by the U.S. Army Engineer Waterways Experiment Station (WES) during fiscal years 1990-1992 as part of the Environmental Characterization for Target Acquisition (ECTA) Program. This program was jointly funded by the U.S. Army Aviation Applied Technology Directorate (AATD), Fort Eustis, VA, and by the Headquarters, U.S. Army Corps of Engineers (HQUSACE), under Project AT40, Scene Dynamics. Mr. Nyle Wilcocks was the AATD Technical Monitor. Mr. Jerry Lundien was the HQUSACE Technical Monitor.

The study was conducted under the general supervision of Dr. John Harrison, Director of the Environmental Laboratory (EL), Dr. Victor Barber, Acting Chief of the Environmental Systems Division (ESD), and Mr. H. Wade West, Chief of the Environmental Analysis Group (EAG), ESD. Mr. Bruce Sabol, EAG, was Principal Investigator responsible for the ECTA Program. Coordination and direct field supervision were provided by Mr. Ken Hall, EAG. Field support was provided by Humphrey Barlow, Tommy Berry, Sean Brewer, Charles Hahn, Ken Hall, Terry Justice, David Leese, Salvador Rivera, Jr., and Joseph Wooley. Computer support was provided by Margaret Sabol and Eddie Melton, ARC Professional Services. Messrs. Sabol and Rivera prepared this report.

At the time of publication of this report, Director of WES was Dr. Robert W. Whalin. Commander was COL Bruce K. Howard, EN.

This report should be cited as follows:

Sabol, B., and Rivera, S., Jr. (1993). "Environmental characterization for target acquisition; Report 2, Analysis of thermal and visible imagery," Technical Report EL-93-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

1 Introduction

Background

Automatic/Aided Target Recognition (ATR) systems are a developing class of machine vision devices that scan a field of regard (FOR), process that information, then report potential objects of interest (targets) to a human operator or to another automatic device. It is the intent of the U.S. Army to equip existing and next-generation attack and reconnaissance helicopters with ATR systems. Performance goals for ATR systems are that they have very high probability of locating and reporting valid targets and very low probability of reporting invalid or false targets for all conditions under which they will operate. Developing ATR systems use sensor information obtained from passive visible and thermal infrared imagers, millimeter wave (MMW) radar, and laser range finders, and non-sensor information such as digital map (i.e. terrain) data and location information from global positioning systems (GPS).

Early testing of developing ATR systems has identified problems in achieving required performance goals. Systems have exhibited inconsistent performance over their intended operational environment, low probability of detection, and high false alarm rates. Further, detection probability and false alarm rates have demonstrated a high degree of sensitivity to terrain and weather (collectively referred to as environmental) conditions, particularly for the passive sensors. Clearly, it is imperative to test under a broad range of environmental conditions during the development cycle. Testers and evaluators in the ATR development community are now burdened with determining the following:

- a. Which continental United States (CONUS) test sites should be used for testing and when they should be used.
- b. How to compare ATR performance results from different CONUS test sites—which sites represent more difficult conditions.
- c. Which CONUS test sites are most analogous to potential theater of operation sites.

- d. How to specify environmental conditions in an ATR system performance test.

The Environmental Characterization for Target Acquisition (ECTA) Program was initiated in an attempt to address these types of concerns. The primary goals of the ECTA Program are to develop and apply a methodology to quantify "scene complexity" of available candidate ATR testing and training sites and to establish methods for specifying environmental conditions for thermal and visible electro-optical (EO) imager systems and 35-GHz radar sensor systems.

Approach

Almost all ATR systems use pattern recognition techniques to detect targets within an imaged background area. This is true whether the system uses a passive EO imager or an active EO imager (e.g. laser) or radar sensors. The ATR logic filters the entire image for targetlike regions which it analyzes in greater detail to make first-level (detection) target acquisition decisions. Detection is the only stage in the target acquisition process that examines the entire image; all subsequent stages (classification, recognition, and identification) use only the regions of interest. Therefore, the ultimate success of target acquisition depends on the system's ability to separate targets from background features that can have similar signature characteristics.

Based on these considerations, an approach was formulated for processing imagery and signals in specific wavebands to determine the distribution of "targetlike" features within the background scene that could result in poor ATR performance (missed detections and false targets). Scenes having a high density of targetlike features are deemed to have high scene complexity and those with few such features are deemed to have low scene complexity. These image characterization measurements, or *metrics*, were determined using thermal and visible image data, and 35-GHz radar data representing a systematic sampling of commonly used CONUS test sites at different times of the day and of the year. These sites would be subjected to intensive measurement of key terrain and meteorological attributes during imaging periods. An analysis would be conducted to relate these measured attributes (referred to as ground-truth conditions) to values of the selected metrics for each specific wavelength and to devise a means of categorizing and predicting metric levels for these sites. Metrics are used here as indicators of the level of scene complexity, which is the relative density of targetlike features a background scene contains.

Scope and Structure

Several constraints were placed on the conduct of the program as follows:

- a. Field measurements would be conducted at five sites commonly used for testing Army aviation ATR systems.
- b. Each site would be visited twice—once during leaf-on conditions and once during leaf-off conditions (for deciduous vegetated sites).
- c. Data collected during each site visit (excursion) would be limited to a 3-day period that would include a single 24-hr imaging period.
- d. Existing U.S. Army Engineer Waterways Experiment Station (WES) instrumentation and imaging assets would be used (includes only visible and thermal imagers; no radar sensor was available).
- e. Imagery (35-GHz radar) collected by the Martin-Marietta Corp.'s 68D radar system during the Multi-Sensor Fusion Demonstration at Fort Hunter Liggett, CA, would be used, and radar analysis would be conducted as a stand-alone task, unrelated to the visible and thermal imaging tasks listed in items *a* and *b* above.

The ECTA Program is documented in three separate reports. Report 1 (Berry, Rivera, and Sabol 1993) describes ground-truth measurements made at each of the selected sites. That report describes procedures used for collection of terrain, meteorological, and radiometric data; appendixes contain a data summary for each site. The study reported herein (second in the series) describes analysis procedures for evaluating the relationships between the site's ground-truth measurements and statistical characteristics of resulting imagery; results of these analyses are presented and discussed. The third report (Curtis and Sabol 1993) in this series describes the radar scene analyses conducted using the Martin-Marietta radar data collected at Fort Hunter Liggett, CA.

2 Methodology

The overall methodology used in this project is illustrated in Figure 1. Field measurements and imagery were systematically collected from selected test sites (step 1). Detailed procedures for obtaining these data are described in ECTA Report 1 (Berry, Rivera, and Sabol 1993). A cursory description of these procedures is provided here for completeness. Image metrics indicative of scene complexity were selected and implemented in software (step 2). Imagery was processed to compute a set of metrics values for each individual image; these values were put into a database containing the corresponding weather and terrain attributes associated with each image (step 3). Finally, statistical analyses were performed to identify environmental and scenario variables that most affect the scene complexity metrics values and to develop techniques for predicting scene complexity metrics levels from environmental and scenario data (step 4). Each of these steps is discussed in the following sections.

Data Collection Procedures

Data were collected at five CONUS test sites commonly used for Army aviation systems testing and evaluation. The sites were selected to allow data to be collected as an analog of temperate, coastal plains, and semiarid environmental conditions as indicated in Table 1. Temperate sites were sampled twice, once during the leaf-on period and once during the leaf-off period. Other sites were sampled only once since vegetation thereon does not change appreciably during the year.

At each site, a single sensor location was selected to view a wide FOR and to achieve a viewing geometry approximating a helicopter scenario. This scenario is characterized by: (a) sensor position 5 to 20 m above the imaged terrain surface; (b) camera pointing angles ranging from horizontal to several degrees below horizontal; and (c) the distance of the center of the images ranging from several hundred meters to several kilometers. The selected FOR was divided into 11 to 22 contiguous $2.5^\circ \times 2.5^\circ$ "scenes" which were imaged by the suite of imagers over a 24-hr period at a 2-hr interval starting immediately before dawn on the second day of each excursion.

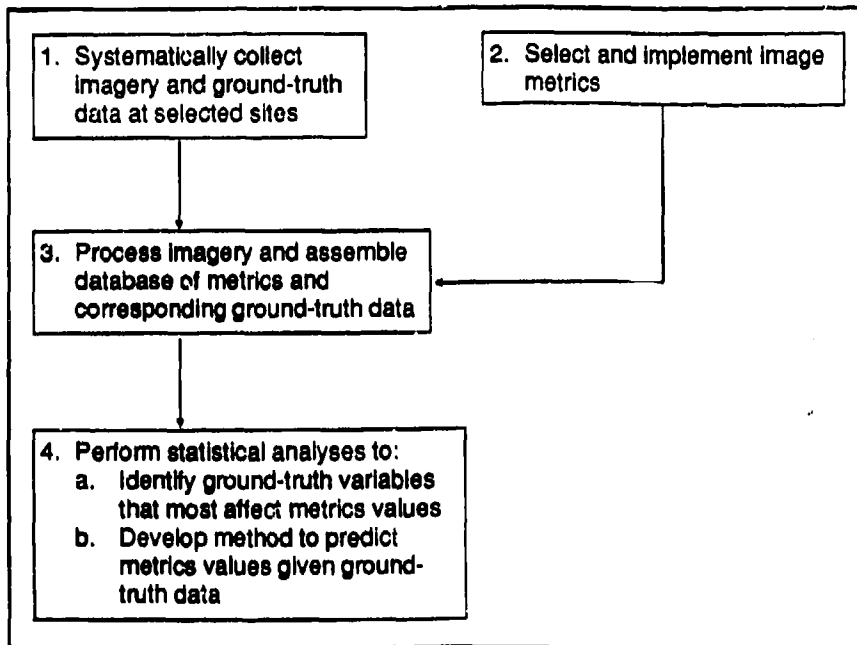


Figure 1. Overall methodology

Table 1 Sampling Locations and Times		
Terrain Type	Data Collection Site (s)	Collection Periods
Temperate	Aberdeen Proving Ground, MD (APG)	18-21 Mar 91 15-18 Jul 91
	Fort Drum Military Reservation, NY (FTD)	24-27 Mar 91 10-13 Jul 91
	Fort A.P. Hill, VA (APH)	15-18 Mar 91 18-21 Jul 91
Coastal Plain	Eglin Air Force Base, FL (EGL)	9-13 Aug 91
Semi-arid	Yuma Proving Ground, AZ (YPG)	10-15 Sep 90

Image data were obtained in visible, mid-, and far-infrared wavebands. Imaging systems were all off-the-shelf commercial systems; specifications are listed in Table 2. Thermal cameras are DC-restored calibrated systems. The visible camera is uncalibrated but uses fixed manual settings (i.e. no automatic gain control); therefore, comparisons can be made between images. Table 3 is an inventory of imagery that passed quality assurance tests and that were successfully calibrated as described by Berry, Rivera, and Sabol (1993).

Table 2 Imaging Equipment Specifications			
Specification	Waveband		
	Mid-IR	Far-IR	Visible
Model	Agema Thermovision 870 system, infrared camera	Agema Thermovision 782 system, infrared camera	Photometrics 200 camera, with Thomson CCD detector
Wavelength band	2-5.6 μ (no filter) 3.5-5.6 μ (with SRX filter)	8-12 μ	0.4-0.7 μ
FOV lens	2.5° x 2.5°	3.6° x 3.6°	3.9° (horizontal) x 2.6° (vertical)
Image size	140 x 140 pixels	140 x 140 pixels	384 (h) x 576 (v) pixels
Radiometric resolution	8-bit resolution	8-bit resolution	14-bit resolution
Radiometric sensitivity	0.1 °C at 30 °C object temperature	0.1 °C at 30 °C object temperature	Not calibrated
Radiometric accuracy	±2.0 °C	±2.0 °C	Not calibrated

Table 3 Inventory of Imagery That Passed Quality Assurance and Calibration Tests						
Excursion (Site/Month)	Waveband				Site Total	Views
	Visible	8-12 μ	3-5 μ	4-5 μ		
YPG/9	77/84*	161/168	162/168	165/168	565	14
APG/3	148/154	307/308	145/308	153/308	1,386	22
APG/7	173/176	301/308	106/308	53/308		
APH/3	54/66	153/154	0/154	0/154	536	11
APH/7	77/88	149/154	54/154	49/154		
FTD/3	84/84	180/182	174/182	181/182	1,189	14
FTD/7	112/112	184/196	134/196	140/196		
EGL/8	127/140	273/280	0/280	0/280	400	20
Total					4,076	81
* Pairs of numbers represent the number of successfully calibrated images obtained out of the total number of imaging opportunities presented.						

Weather conditions including air temperature, relative humidity, solar radiation, wind speed and direction, and precipitation rates were measured and recorded using a portable weather station interfaced with a digital recording unit. Additionally, radiometric temperatures of representative samples of the predominant terrain surface types were measured with staring radiometers. Automated measurements were made once per minute and stored as 15-min averages. Table 4 contains a description of the instrumentation used and the units of measurement.

Terrain attribute data were measured for each scene through mensuration of color photographs taken from the designated sensor positions. Color photographs were taken of each $2.5^\circ \times 2.5^\circ$ scene once during daylight hours using a 35-mm camera equipped with a zoom lens. Enlarged photographs were interpreted to delineate the boundary of each terrain/vegetation type within each scene. Boundary overlays were mensurated to determine: (a) the percent cover of each terrain type in the image plane and (b) the length of edge between all different types of terrain cover. The status of the vegetation (GREEN, active or dormant) was also recorded.

In addition to the terrain variables determined by direct mensuration, several "generic" terrain variables were introduced to generate a terrain data subset common to all sites. Such variables include POLYGONS, TYPES, VEGET, EDGE, and HARDEGE. POLYGONS consist of the total number of discrete enclosed terrain areas within a scene without regard to duplication of types. TYPES is the total number of terrain classes (Table 4, Report 1). VEGET consists of the sum of the percentage of grass cover (GRASS) and the percentage of tree cover (TREES). EDGE is the total linear length of edges (in units of angular degrees) between adjoining terrain classes. HARDEGE consists only of linear edge between terrain surfaces with significantly different thermal properties that would be expected to have a strong thermal contrast during most times of the day. These include edges between water and all other surfaces, those between sky and all other surfaces, and those containing a vertical discontinuity such as trees and other terrain classes.

Scenario variables were computed for each individual image, including camera pointing angles (AZIMUTH and elevation (ELEV)), range to the center of the image (RANGE), and bidirectional angle (angle between viewing and solar illumination vectors). Range to the center of each image was computed using a passive ranging technique applied to digital terrain elevation for each site. These procedures are detailed in ECTA Report 1. Bidirectional angle (BDA) was computed based on the camera pointing angle and the solar illumination angle at the time each image was collected. Each BDA data point was assigned to one of five classes: class "0" when the sun was not up, and classes "1" through "4" for angles between 0 and 180 deg in 45-deg increments.

Table 4 Meteorological and Radiometric Instrumentation				
Variable	Instrument	Accuracy	Units	Database Variable Name*
Air temperature	Fenwal electronic UUT51J1 thermistor	± 0.4 °C	Degrees C	AIR_TEMP
Relative humidity	Phys-Chem. research PCRC-11 humidity gauge	$\leq 3\%$	Percent	REL_HUM
Incoming solar radiation (0.5-1.0 μ)	LI-Cor LI200S Pyranometer	$\pm 5\%$	Watts/square meter	SOL_RAD
Mean wind speed	Met One, Inc., model 014a contact anemometer	$\pm 1.5\%$	Meters/second	WIND_SPD
Mean wind direction	Met One, Inc., model 024a potentiometer windvane	± 5 deg	Degrees clockwise from north (true)	WIND_DIR
Precipitation	Texas Electronics, model TE525 tipping bucket rain gage	$\pm 1\%$ at ≤ 2 in/hr	Inches	PRECIP
Radiometric temperature	Everest Interscience, Inc., series 4000, 8-12 μ infrared temperature transducers (4°FOV)	± 0.5 °C	Degrees C	TH (surface) (surfaces = BUSH, GRASS, ROAD, SOIL, TREE, WATER)
* Variable names used in database are printed in all uppercase letters.				

All temporal (meteorological and radiometric variables), scene characteristic, and scenario data associated with each individual image were placed into a database for use in analyses. Table 5 contains a comprehensive list of these variables.

Image Metrics

Image metrics refer to the process and results of quantifying the distribution of specific features within a digital image. Image metrics are usually classified as to whether they require knowledge of target location (target dependence or independence) and whether they measure features in the entire image (global) or only a localized area (local). Numerous image metrics have been proposed and described (Beard, Clark, and Veltin 1985, ERIM 1985, Peters 1988). They range from very general global measures, such as image gray level mean and standard deviation, to very specific local measures, such as target-sized

Table 5 Ground-Truth (Independent) Variables Associated with Each Image		
Meteorological/Radiometric	Scene Characteristic	Scenario
<p>Meteorological</p> <p>Relative humidity (RELHUM)</p> <p>Air temperature (AIRTEMP)</p> <p>Wind speed (WINDSPD)</p> <p>Wind direction (WINDDIR)</p> <p>Solar radiation (SOLAR)</p> <p>Time history of solar radiation (SRmin - solar radiation in minutes previous (SR15, SR30, SR60, SR120)</p> <p>1-hr solar difference (=SOLAR-SR60) (SOLDIF)</p> <p>Radiometric</p> <p>Average radiometric temperature terrain feature types: (TH_BUSH, TH_GRASS, TH_ROAD, TH_SOIL, TH_TREE, TH_WATER)</p>	<p>Scene Feature Composition (%)</p> <p>Grassy fields (GRASS)</p> <p>Man-made objects (MANMAD)</p> <p>Bare soils (SOIL)</p> <p>Roads and trails (ROAD)</p> <p>Trees and tall shrubs (TREE)</p> <p>Standing water (WATER)</p> <p>Mountains (MOUNT)</p> <p>Sky (SKY)</p> <p>Generic</p> <p>No. discrete polygons (POLYGONS)</p> <p>No. terrain types (TYPES)</p> <p>Total edge length (EDGE)</p> <p>Edge length between polygons thermally dissimilar terrain types (HARDEGE)</p> <p>Vegetation status (1= active, 0=dominant) (GREEN)</p> <p>Vegetation coverage (=GRASS+TREE) (VEGET)</p> <p>Specific edge measures Edge lengths between each feature type and all others (typeEDGE)</p>	<p>Horizontal LOS angle (AZIMUTH)</p> <p>Vertical LOS angle (ELEV)</p> <p>LOS range (RANGE)</p> <p>Bidirectional angle (BIDIR)</p> <p>Class of bidirectional angle (0=sun not up, 1=0 to 45°, 2=46-90°, 3=91-135°, 4=136-180°)</p> <p>(BDA)</p>

contrast at specific image locations. Most image-based ATRs use contrast and edge strength of target-sized image features to identify regions of interest within the image (Peters 1988; Lahart, Jones, and Shields 1988). Research has shown some statistical correlation between image metrics based on these types of features and detection/false alarm performance of ATRs. Because almost all ECTA imagery are without targets, only global target-independent metrics, or "scene metrics," are used. The following paragraphs describe these metrics and their computation.

Twenty-one different scene metrics were computed in this study. These are listed and briefly described in Table 6; computational procedures and interpretation are described below. Twelve of these characterize the data-space distribution of temperature or brightness values; the remaining nine describe target-sized spatial variations within the imagery. Several metrics are dimensionless (ENTROPY, SKEWNESS, KURTOSIS, REYNOLDS); all others have the units of the original image, which in the case of thermal images are converted to equivalent temperature units. The field of view (FOV) of the ground-obtained ECTA imagery often contained more foreground (objects at a closer range than 200 m) and far background (objects at a range in excess of 10 km) than would be expected with helicopter-obtained imagery; steps were taken to avoid these areas during image metrics processing. All metrics are computed only within a processing region of the image. This is defined as the central portion of the image remaining after the far background and foreground portions have been excluded. Passive ranging (Berry, Rivera, and Sabol 1993) was used to determine these areas.

Data space distribution metrics provide general information about the statistical spread of digital brightness values but provide no information about how brightness values are spatially distributed within the image. They were selected because of their common use as statistical descriptors. By and large, they provide no information about the distribution of targetlike features in the imagery. Processing was initiated by generating histograms of gray level values within the processing region. Eight measures are computed from the histogram: the minimum value (MIN), the 5-percentile value (PERC_05), the median value (MEDIAN), the mode (MODE), the 95-percentile value (PERC_95), the maximum value (MAX), the difference between the 95- and 5-percentile (RNG_90), and entropy (ENTROPY). ENTROPY is a dimensionless measure which indicates the evenness of the distribution. Values near zero indicate an uneven distribution in which most of the pixels fall into relatively few different brightness values. High values indicate that pixels are evenly distributed among the available brightness bins. Since this measure is sensitive to variable camera sensitivity settings, entropy for thermal images was computed on 0.1 °C bins instead of raw digital values. The equation used is as follows:

$$ENTROPY = -\sum_{i=1}^I p_i \ln (p_i) \quad (1)$$

where

I = number of brightness value bins

p_i = probability of a pixel occurring in the i^{th} bin

The four moments of the distribution of gray level values within the processing region (mean, variance [standard deviation], skewness, and kurtosis) are computed (Press et al. 1986). The first and second moments, mean and standard deviation, have the dimensions of the original data—gray levels or equivalent blackbody temperature. Skewness and kurtosis are dimensionless numbers. Each is described below:

$$MEAN = \frac{1}{N} \sum_{n=1}^N x_n \quad (2)$$

$$SD = \sqrt{\frac{1}{N-1} \sum_{n=1}^N (x_n - MEAN)^2} \quad (3)$$

where

N = number of pixels in processing region

x_n = brightness value of n^{th} pixel in processing region

Standard deviation represents the root-mean-square deviation.

Skewness, the third moment, is a dimensionless value which characterizes the asymmetry of the distribution. Values near zero represent a symmetric distribution. Positive values indicate an asymmetric distribution distorted to the right. Negative values indicate an asymmetric distribution distorted to the left.

$$SKEWNESS = \frac{1}{N} \sum_{n=1}^N \left[\frac{x_n - MEAN}{SD} \right]^3 \quad (4)$$

Kurtosis, the fourth moment, is a dimensionless value indicating the relative peakedness or flatness of the distribution relative to a normal (Gaussian) distribution. Values near zero indicate a normal distribution. Positive values indicate a highly peaked monomodal distribution. Negative values indicate a flat or possibly multimodal distribution.

$$KURTOSIS = \left[\frac{1}{N} \sum_{n=1}^N \left(\frac{x_n - MEAN}{SD} \right)^4 \right] - 3 \quad (5)$$

The remaining metrics characterize target-sized spatial variation in imagery. These were selected because they quantify the distribution of targetlike features and therefore may be relevant to ATR sensor performance. Two metrics characterize local variability within the processing region. Hetzler et al. (1987) described what they called a clutter metric (CLUTTER), computed as the average standard deviation of adjoining squares twice the size of the longest dimension on the intended target. This was implemented using a square image window equivalent to 20 m on a side computed using the passive range estimation at the center of the processing region. This measure represents the average local variation.

$$CLUTTER = \sqrt{\frac{1}{MJ} \sum_{m=1}^M \sum_{j=1}^J (x_{mj} - \mu_m)^2} \quad (6)$$

where:

M = number of adjoining square windows in processing region

J = number of pixels in square window

x_{mj} = gray level of the j^{th} pixel in the m^{th} window

μ_m = mean value of the m^{th} window

Reynolds (1990) extended this concept by computing the ratio of global to local variation.

$$REYNOLDS = \frac{SD - CLUTTER}{SD} \quad (7)$$

REYNOLDS is a dimensionless ratio ranging between zero and one. Values near zero indicate that total variation (*SD*) is attributable entirely to variation in local regions (*CLUTTER*); conversely, values near unity indicate that local variation contributes nothing toward total variation.

The remaining metrics characterize the distribution of target-sized local contrast. The basis for these metrics is computation of local target-sized contrast using a double window (Carlson and Radford 1986). For each pixel within the processing region, a smallest enclosing rectangle is computed in image dimensions (pixels) corresponding to a 6-m (horizontal) by 3-m (vertical) rectangle¹ in scene dimensions (Figure 2). This computation is based on the passive range estimation of the current pixel. The rectangle, referred to as the target window, is surrounded by another twice its size, referred to as the background window. The background window surrounds the target window but does not include it. The mean brightness value of pixels within the background window is subtracted from the mean within the target window:

$$contrast = \frac{1}{T} \sum_{i=1}^T x_i - \frac{1}{B} \sum_{b=1}^B x_b \quad (8)$$

where

T = number of pixels in target window

x_i = gray level of the i^{th} pixel in the target window

B = number of pixels in the background window

x_b = gray level of the b^{th} pixel in the background window

The resulting local contrast value is stored in a contrast histogram. Positive values indicate bright (hot) contrast of the target window; negative values indicate dark (cold) contrast. This double window is convolved with all pixels in the processing region, resulting in a histogram of target-sized contrasts. Seven points are sampled on this histogram: the minimum (CNT_MIN), the 5-percentile value (CNT_05), the 25-percentile value (CNT_25), the median value (CNT_50), the 75-percentile value (CNT_75), the 95-percentile value (CNT_95), and the maximum value (CNT_MAX).

¹ These dimensions correspond to the smallest enclosing rectangle required to contain any armored vehicle from any forward-looking perspective.

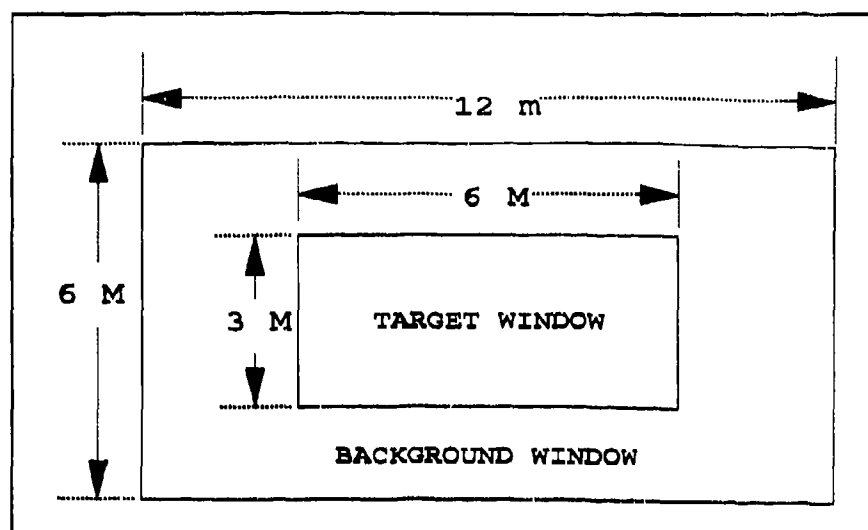


Figure 2. Range-dependent double window for measurement of target-sized contrast

Metrics described above are listed and explained in Table 6. The image processing software for computing these metrics was written in Turbo Pascal 5.0 and run on an IBM compatible 386-based personal computer equipped with a Paradise VGA Graphics card for image display. A listing of these programs is contained in Appendix A.

Analysis Procedures

Analysis was performed in two phases. In the first phase, graphical techniques were used to examine the range and variation of the ground-truth variables and image metrics. In the second, analyses were performed to determine the importance of each ground-truth variable relative to selected image metrics and to use these ground-truth measurements as independent variables to predict metrics values (dependent variables). Several ground-truth variables thought to be important represent a nominal data type¹ (classes of bidirectional angle [BDA] and classes of plant growth status [GREEN]); these data types cannot be directly used in multilinear regressions or other standard parametric statistical techniques. Consequently, an alternative non-parametric analysis procedure, "decision tree classifier methodology," was selected. A decision tree classifier is a tree data structure² which is traversed to arrive at a prediction of the dependent variable. The path selected at each node in the tree is determined by decisions on the value or class of independent variables. There

¹ Observations may be separated according to categories.

² Conventional data structure terminology, such as that found in Aho, Hopcroft, and Ullman (1983), is used in describing tree structures in this report.

Table 6
Image Metrics List and Description

Metric (Database Name)	Description	Source
Minimum (MIN) 5 percentile (PERC_05) median (MEDIAN) mode (MODE) 95 percentile (PERC_95) maximum (MAX)	Histogram-based measures of distribution of gray levels in image, units of °C in thermal imagery, units of digital brightness in visible imagery	
90% range (RNG_90)	Difference between 95- and 5-percentile values, range encompassing 90 percent of image, units of °C in thermal imagery, units of digital brightness in visible imagery	
Entropy (ENTROPY)	Dimensionless measure of uniformity of distribution of pixel brightness <u>Interpretation:</u> high value (>3) indicates relative uniformity	Carlson and Radford (1986)
Mean brightness (MEAN)	Average brightness in processing region,* units of °C in thermal imagery, units of digital brightness in visible imagery	Press et al. (1986)
Standard deviation (SD)	Standard deviation of all pixels in processing region, units of °C in thermal imagery, units of digital brightness in visible imagery	Press et al. (1986)
Skewness (SKEWNESS)	Dimensionless measure of asymmetry of distribution of pixel brightness in processing region. <u>Interpretation:</u> negative values indicate asymmetric tail in negative direction; near zero indicates symmetry; positive values indicate asymmetric tail in positive direction	Press et al. (1986)
Kurtosis (KURTOSIS)	Dimensionless measure of peakedness of distribution relative to normal distribution. <u>Interpretation:</u> negative values indicate flat or multimodal distributions, values near zero indicate a normal distribution, positive values indicate a highly peaked monomodal distribution.	Press et al. (1986)
Georgia Tech clutter metric (CLUTTER)	Average standard deviation of boxes in image twice the longest dimension of target <u>Interpretation:</u> high values indicate local variation of pixel brightness in image	Hetzler et al. (1987)
Reynolds metric (REYNOLDS)	Dimensionless ratio (0-1) equal to $((SD - CLUTTER)/SD)$ <u>Interpretation:</u> represents the portion of thermal variation attributed to variations within local regions	Reynolds (1990)
Target-sized contrast (CNT_nn) nn=MIN 05 25 50 75 95 MAX	A range-dependent double-window metric which histograms local target-sized contrast for all of image in processing region. <u>n</u> percentile represents the contrast brightness at the <u>n</u> percentile point on the histogram; <u>ex.</u> 95 percentile contrast represents contrast which is exceeded by only 5% of image. <u>Interpretation:</u> high values indicate background contains target-sized features.	Sabol and Hall (1990)

* Only pixels between 0.2- and 10.0-km range are processed.

are numerous types of decision tree classifiers; these are grouped based on type of tree structure, ways the tree is traversed, and methods by which the tree is "grown." Detailed reviews of decision tree classifiers may be found in several technical papers (Safavain and Landgreke 1991; Dattatreya and Kanel 1985). For the present study, a hierarchical top-down binary decision tree methodology contained in the commercial software package CART (Classification and Regression Tree) (Breiman et al. 1984), was selected. Using a decision tree analysis procedure made it possible to predict classes of a dependent variable (image metric values in this case) using independent variables (environmental measurements in this case) of unrestricted data types (nominal, ordinal¹, or interval²) without restrictive assumptions about the distribution of these variables. It further provides insight into how important each candidate independent variable is to the prediction.

CART constructs a tree by recursively searching over all independent variables to produce a sequence of optimal binary splits within the data set. A large tree is grown in this manner; subsequently, a pruning algorithm is applied which removes all branches within the tree which reduce overall accuracy. The resulting tree maximizes predictive accuracy relative to its size. Figure 3 illustrates a hypothetical CART tree which predicts the class of a dependent variable.

The tree is entered at the top (root) node. Here a yes/no question is answered about the value of independent variable $x(3)$. If $x(3)$ is less than 5.0, the left descending branch is taken; if it is not, the right descending branch is taken. At each intermediate (nonterminal) node another yes/no question is answered regarding the value of other independent variables ($x(n)$), dictating the path to be followed. Arrival at a terminal node ends the traversal process with a prediction of the dependent variable's class. The tree is grown and tested in a two-step process, beginning with the random division of the data set into two portions. One portion is used to grow the tree. The accuracy of this tree is then determined by processing the second portion through the tree and comparing predictions of the dependent variable against corresponding actual values. In this study the dependent variables are binned into ordinal classes so predictive accuracies are computed from the resulting confusion matrices.

Confusion matrices, also known as error matrices, tally the predicted class of each individual observation against its corresponding actual class in a tabular form. The number at each location in the table (row i , column j) represents the number of observations which were classified as class i but were actually class j . Table entries along the main diagonal ($i=j$) represent correctly classified observations; those off the main diagonal represent specific misclassifications. "Classification accuracy" is computed as the sum of the main diagonal of the confusion matrix divided by the grand total of the entire matrix. Since the dependent variables are of ordinal data type, all misclassifications are not

¹ Observations may be arranged from smallest to largest.

² The numerical value of the observation has physical meaning.

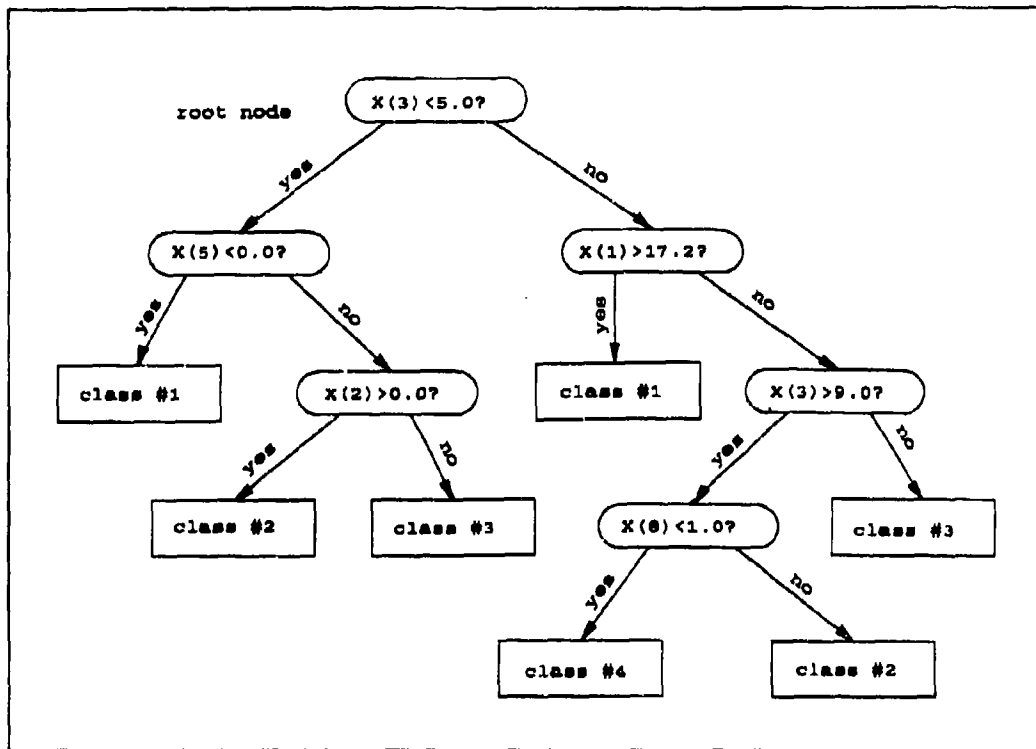


Figure 3. Typical binary tree structure generated by CART

weighted equally. Misclassification into a neighboring class (e.g. classifying a true class #1 as a class #2) is a less severe error than classifying into a non-neighboring class (classifying the same true class #1 as a class #3). A second accuracy measure, "severe misclassification," represents the percentage of the observations misclassified into a non-neighboring class.

CART internally evaluates the relative importance of each independent variable by quantifying how well data splits on each independent variable separate the dependent variable into distinct groups at each node within the tree. This measure is summed over all nodes for each variable and normalized by dividing by the highest value produced among all variables. The result is a range of importance values between 0 and 100, with the most important variable always having a value of 100. This procedure, described in greater detail in Breiman et al. (1984), is used to judge how important each independent variable is toward the prediction of the dependent variable.

Several of the metrics computed quantify image attributes similar to those used by ATR systems in the location of regions of interest. These include standard deviation (SD), CLUSTER, REYNOLDS, and the local contrast metrics (CNT_{nn}). Of these, SD and CNT₉₅ have demonstrated a statistically significant correlation with probability of detection for several actual

ATR systems¹. Similar data do not currently exist to support the importance of CLUTTER and REYNOLDS. Relatively high values of these selected metrics tended to coincide with relatively low values of probability of detection. For the purposes of this study, ordinal classes of SD and CNT_95 in the visible and the 8-12 μ wavebands² serve as the dependent variables for which predictors will be developed. Ordinal classes were derived by histogramming these metrics and binning each into low (0-33 percentile), medium (34-66 percentile), high (67-89 percentile), and very high (90-100 percentile) classes (Figure 4). These ranges are considered representative of values for these sites, and binned classes are used as indicators of scene complexity. CART trees were generated to predict these metrics classes. The question of importance of the various ground-truth variables is directly evaluated by CART.

Decision tree classifiers were generated for classes of metrics SD and CNT_95 in visible and 8-12 μ wavebands using three separate sets of independent variables as illustrated in Table 7. The first set (level 01) used the full set of scene, meteorological, and scenario variables. The second set (level 02) used a reduced set of generic scene data, full meteorological data, and scenario data. The third set (level 03) used only meteorological and scenario data. Meteorological data sets used were the same for thermal and visible bands with the exception that only instantaneous solar measurements (as opposed to time series measurements) were used for visible analyses. The relative importance of independent variables and the overall accuracy of resulting classifications were compared to determine the importance of the various data types.

¹ This information is contained in the final briefing of the MultiSensor Fusion Demonstration, presented at Fort Eustis, VA, August 1989; available through DTIC.

² Data losses in the 3-5 μ waveband imagery (Table 3) preclude extensive analysis in this band.

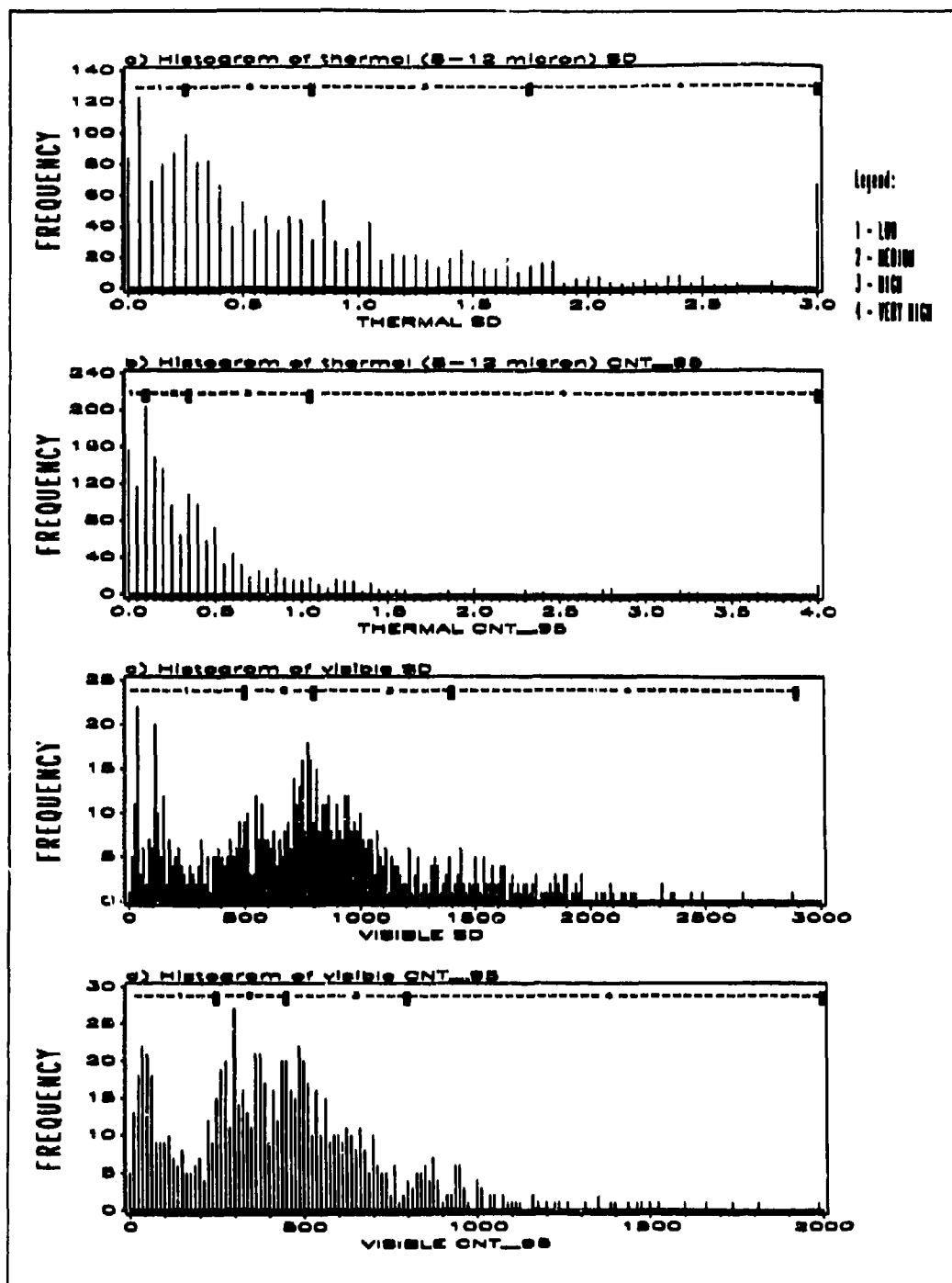


Figure 4. Four classes of dependent variables: (a) thermal SD, (b) thermal CNT_95, (c) visible SD, (d) visible CNT_95

Table 7 Classification Trees Generated for Metrics SD and CNT_95 for Visible and 8-12μ Waveband Imagery			
Dependent Variable Groupings (Waveband)	Independent Variable Data Sets		
	01) Meteorological Scene Scenario	02) Meteorological Generic Scene Scenario	03) Meteorological No Scene Data Scenario
Thermal	STALL01, CTALL01	STALL02, CTALL02	STALL03, CTALL03
Visible	SVALL01, CVALL01	SVALL02, CVALL02	SVALL03, CVALL03
TREE FILE LEGEND: mwsssvv - 7 character code where m: metric selected (S = SD, C = CNT_95 w: wavelength (T = thermal, V = visible) ss: site (ALL = all sites) vv: independent variable data set (01 = meteorological, scenario, and terrain data 02 = all meteorological and scenario data with generic terrain data 03 = meteorological and scenario data only)			

3 Results

Comparison of Ground-Truth Conditions and Image Metrics

Scene and scenario data

A complete listing of data from the scene content analysis, mentioned in Chapter 2 and described in detail in Report 1, is contained in Appendix B. Major season independent attributes of the scenes are illustrated in Figures 5 - 7. Terrain classes comprising each scene at each site are shown in Figure 5. Number of discrete terrain areas (POLYGONS) for each scene at each site is illustrated in Figure 6. EDGE and HARDEGE for each scene at each site are shown in Figure 7.

Eglin AFB, Fort Drum, and Fort A.P. Hill sites contained similar types of vegetation cover. All were predominantly vegetated with grassy fields in the foreground and trees in the background. These three sites also had a relatively small portion of HARDEGE. The Aberdeen Proving Ground site was the only one to contain surface water, resulting in a relatively large portion of HARDEGE. Further, the Aberdeen site had the largest number of discrete terrain areas (POLYGONS) among all sites. The Yuma Proving Ground site differed most from the other four; it contained the largest portion of bare ground and nonvegetated terrain and was the only site with large surface geometry variations (i.e., mountains).

Meteorological and radiometric data

A complete listing of meteorological and radiometric data is contained in Appendix C. Temporal plots of meteorological and radiometric conditions during the cool-weather excursions are illustrated in Figure 8; those for warm weather excursions are illustrated in Figure 9. During the cool weather excursions (Figure 8), cloudy conditions existed at the Fort Drum and Fort A.P. Hill sites; clear sky conditions were present only at the Aberdeen site. Accordingly, air temperature was warmer and exhibited greater variations, relative humidity was lower, and thermal contrasts between different terrain surfaces were higher at the Aberdeen site. During the warm-weather

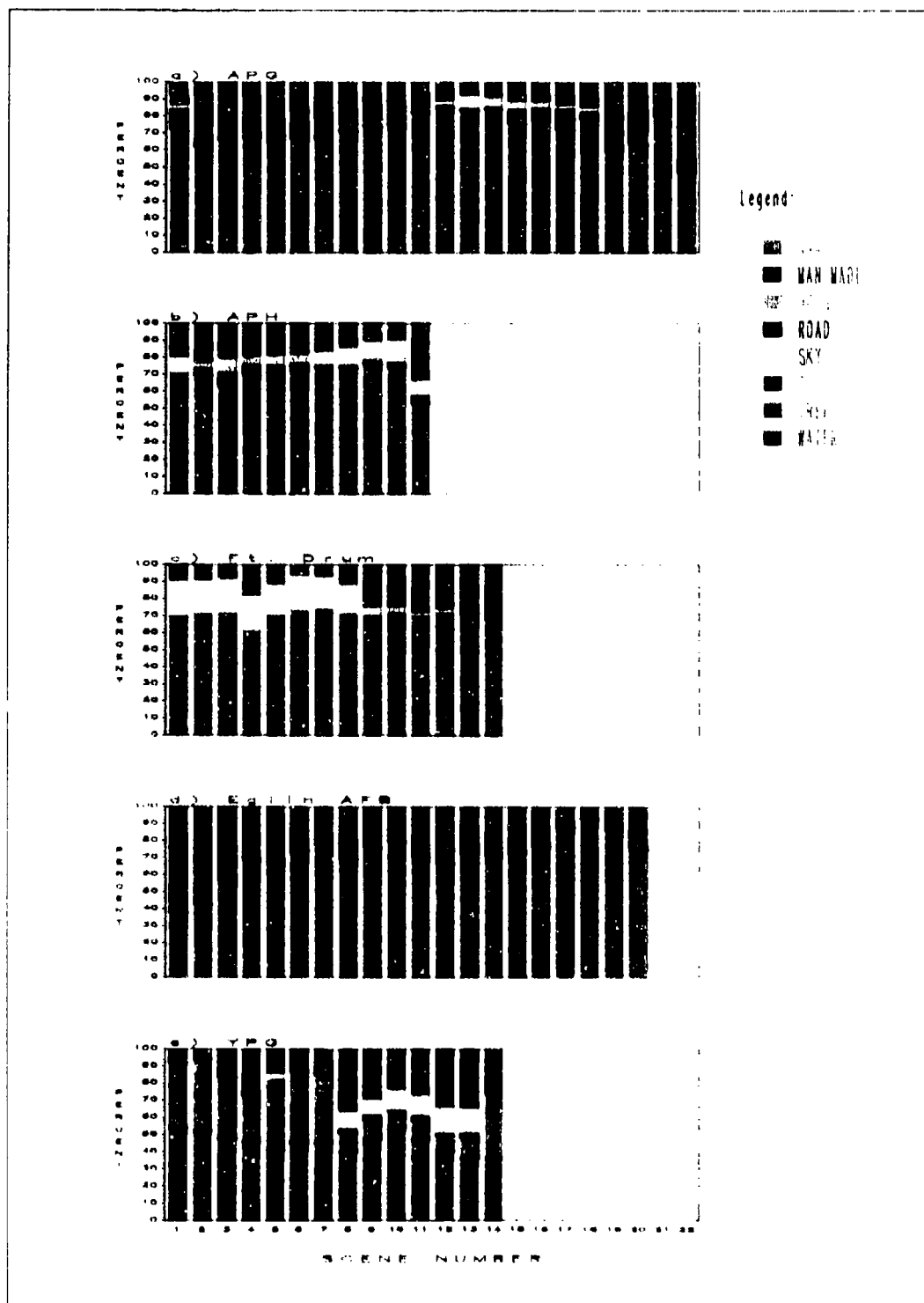


Figure 5 Terrain class composition by scene and site

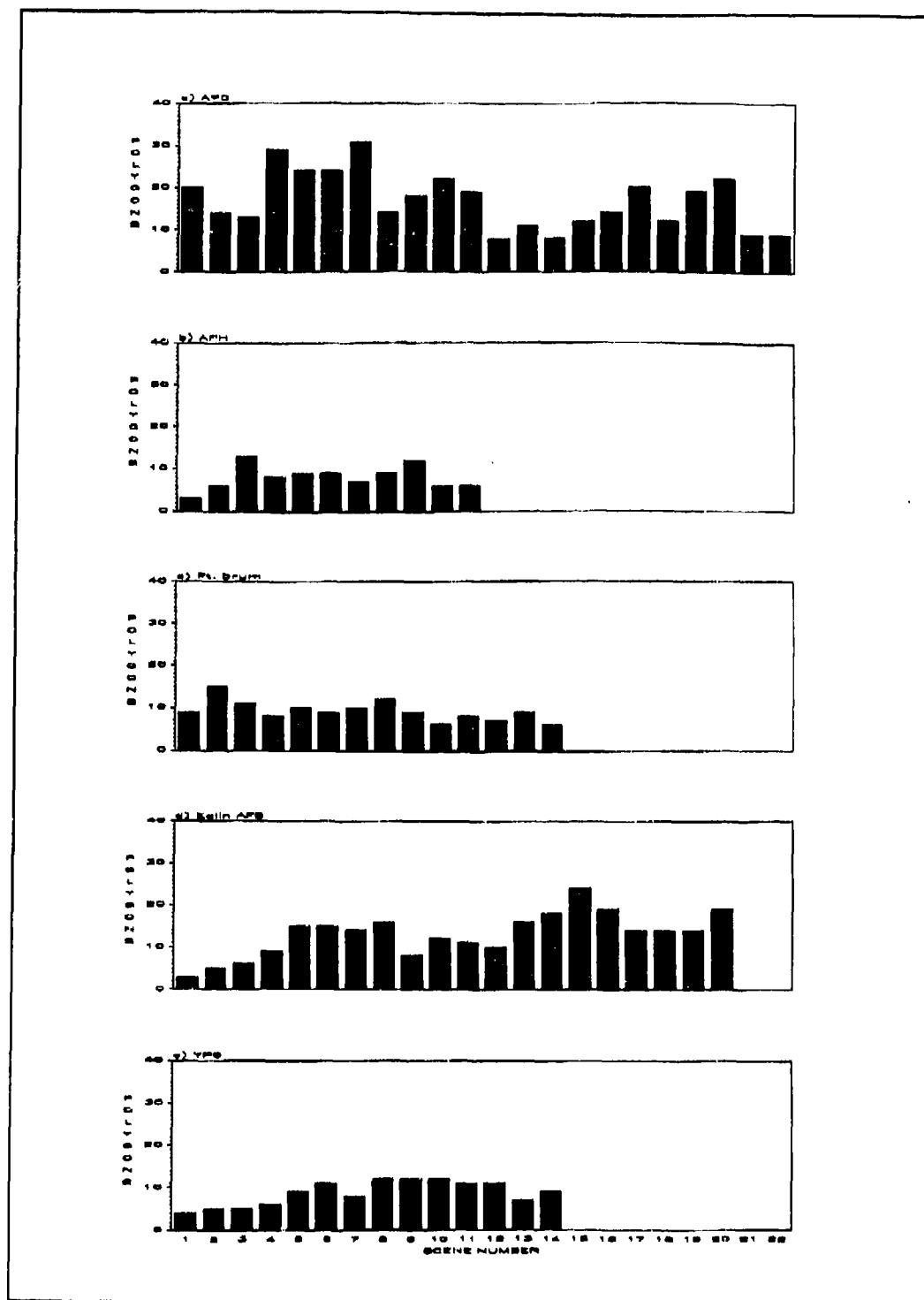


Figure 6. Number of discrete terrain areas (POLYGONS) by scene at each site

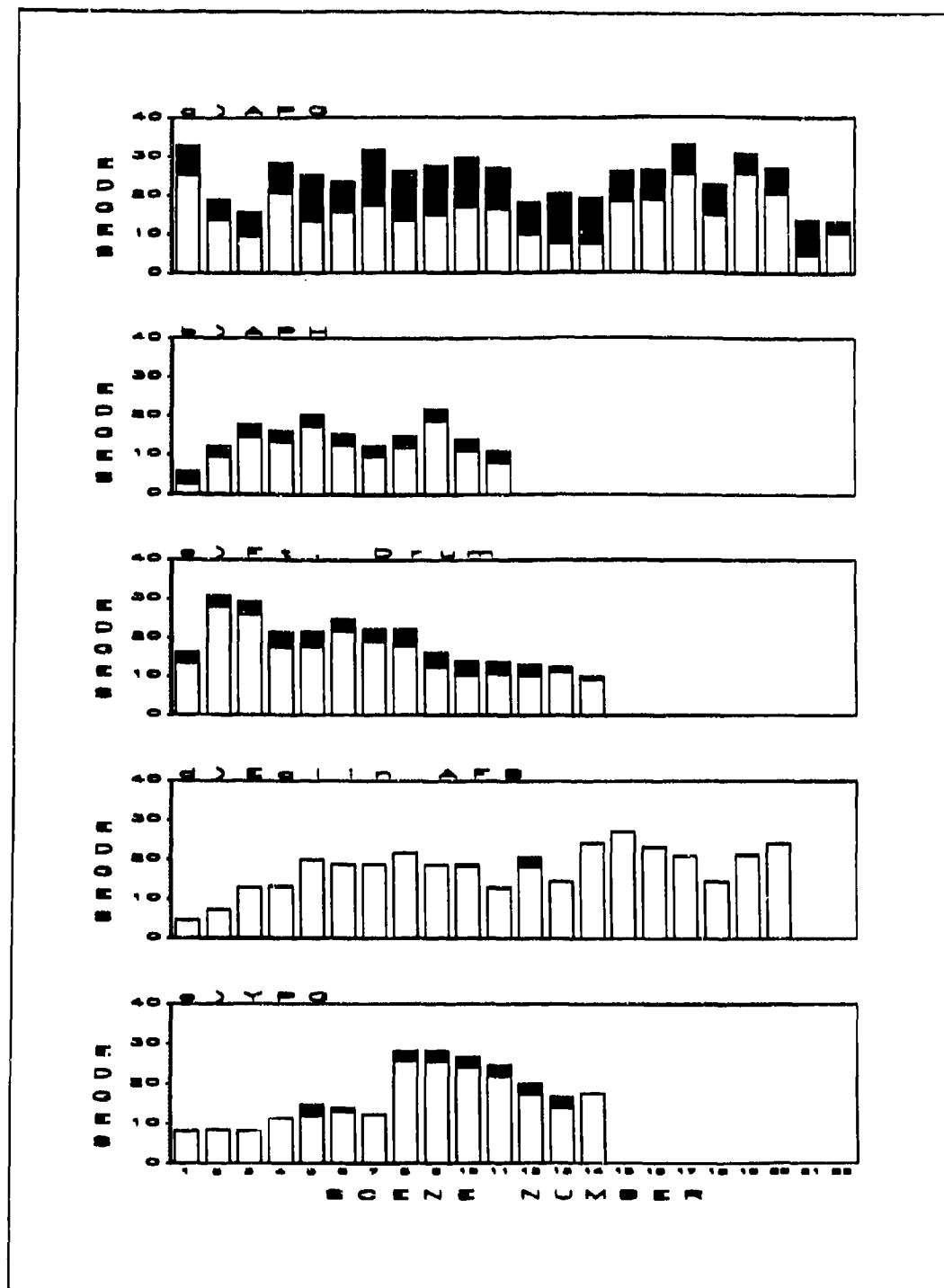


Figure 7. Total linear edges (EDGE - total height of bar) and edges between thermally dissimilar terrain classes (HARDEGE - thickness of darkened portion of bar) by scene for each site

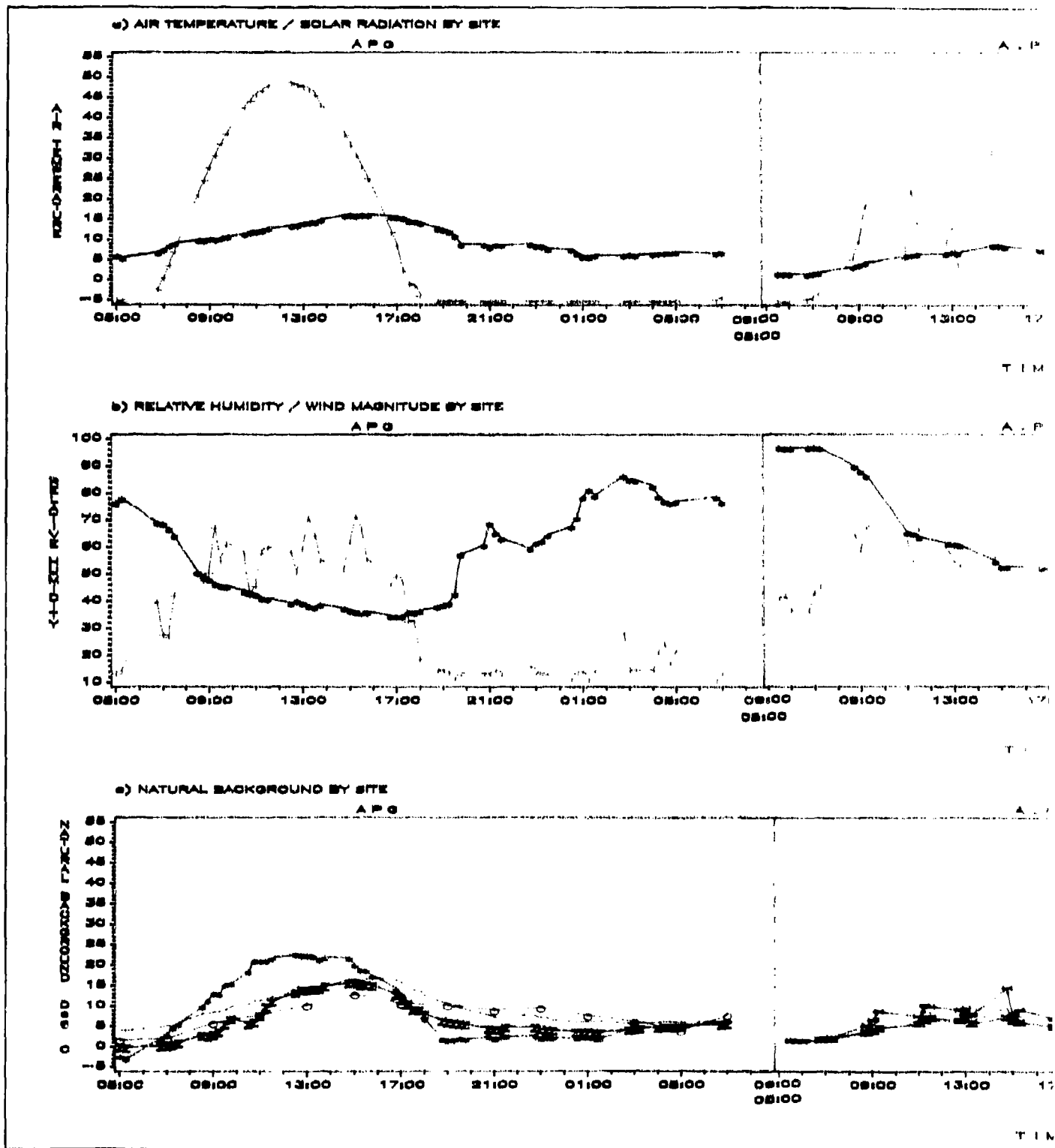
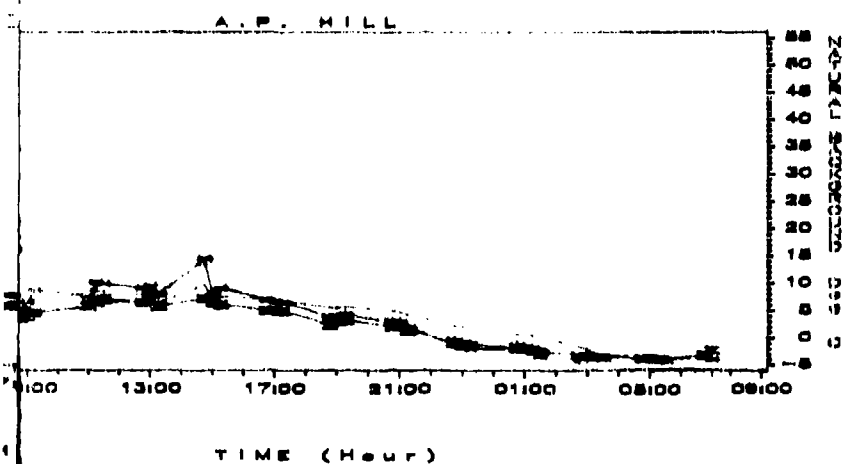
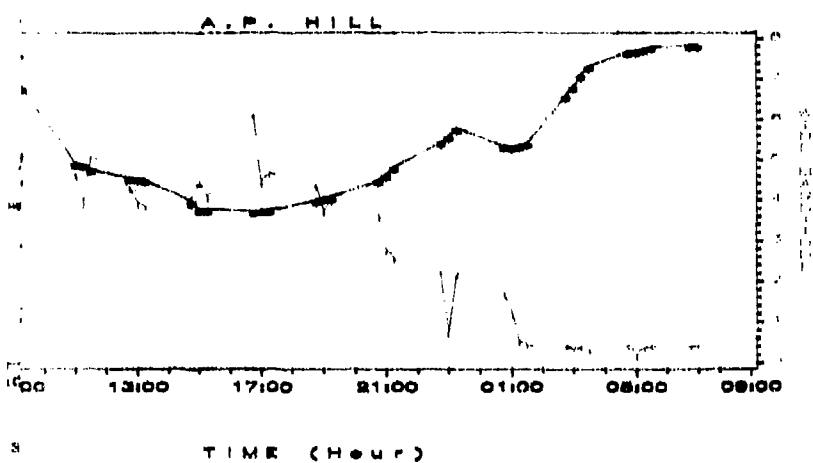
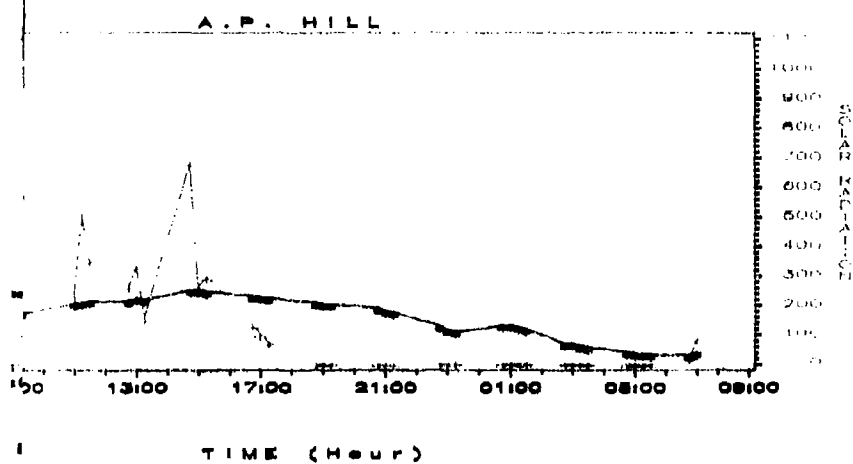


Figure 8. Temporally varying meteorological and radiometric conditions by site for cool-weather excursions (Continued)



(Continued)

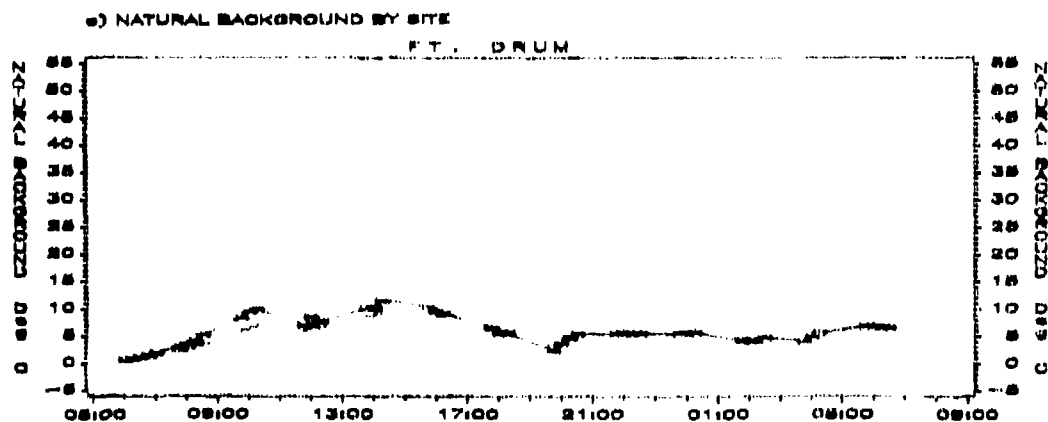
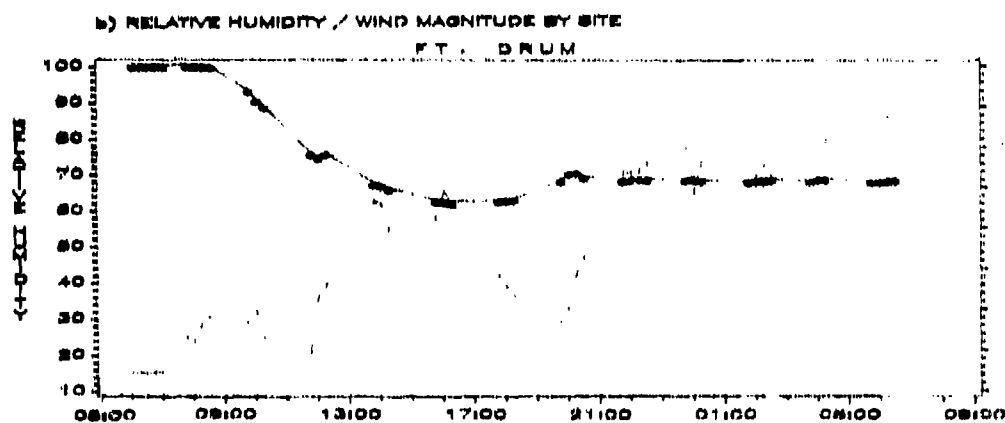
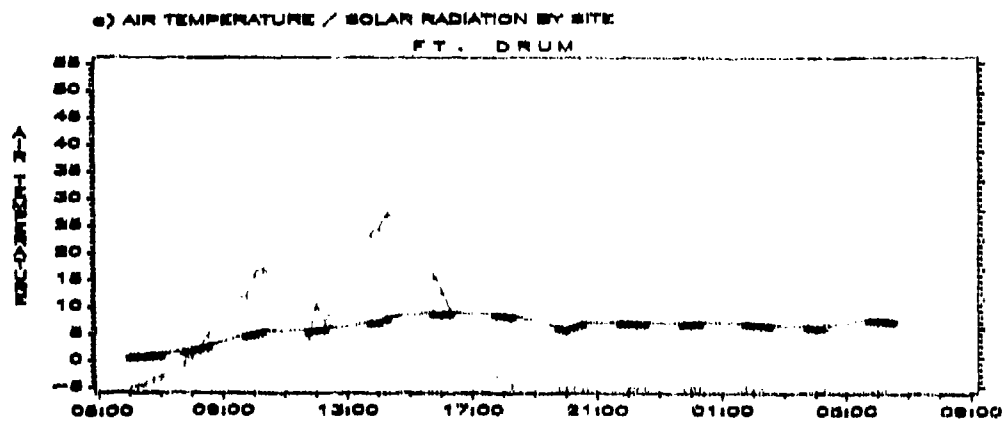


Figure 8. (Concluded)

times and conditions. Table 11 lists the classed outputs from this algorithm for these conditions. Predicted class levels for the thermal local variability metric indicate low levels from midnight (0000) until 10 AM (1000). Beginning at the noon (1200) measurement, the levels jump to high then fluctuate between medium and high until 10 PM (2200). With these predictions as a guide, critical test times can be selected to achieve the best balance of scene complexity conditions available at this site and time. The predictor could also be used in a site selection mode by entering characteristics of potential scenes and expected seasonal meteorological conditions to determine which candidate scenes give the best range of complexity conditions for the intended system mission and operational environment.

As with any empirically based research effort, the limits to which the results may be safely generalized are based on the adequacy of the sample and the underlying assumptions. Practical considerations dictated that the sample from which analyses were performed be of a limited size and be obtained by systematic sampling as opposed to random sampling. All imagery data were obtained from a single sensor location at each of five separate test locations. These were some of the most commonly used ATR development and testing sites; however, they represent only a limited sample of terrain conditions. These included three temperate locations with deciduous vegetation, each visited once during leaf-on and leaf-off periods, and one coastal-plain and one semi-arid location, each visited during the summer. Temporally varying meteorological measurements also represent a limited range of conditions. The systematic diurnal sampling was intended to capture all conditions occurring within the 24-hr period sampled, but the 24-hr period is essentially just a single random sample of all daily weather conditions occurring at a site during the season sampled. Completely sunny conditions were encountered during the Yuma visit and during both Aberdeen visits. Likewise, completely cloudy conditions were encountered at Fort Drum. No snow conditions were encountered at any site. Clearly, there are myriads of important meteorological conditions and terrain factors not considered in this study because of the limited database. It is doubtful whether the present database could be considered an adequate sample of all conditions and terrain factors likely to be encountered at CONUS test sites.

The second consideration in generalizing the results is the degree to which the selected metrics really reflect difficulty posed to an ATR. Previous tests¹ showed a high negative correlation between probability of detection (averaged over all targets in a scene) and CNT_95 and SD for some or all ATR systems. CNT_95 showed the strongest correlation ($p < 0.01$) with average probability of detection for all ATR systems in that test². However, even

¹ Information contained in final briefing of the MultiSensor Fusion Demonstration, presented at Fort Eustis, VA, August 1989; available through DTIC.

² This strong negative correlation indicates that high values of CNT_95 tend to coincide with low values of probability of detection averaged over all targets in the scene.

Table 11
Predictions of Local Thermal Variability Using Decision Tree
CCTALL04

Time of Day (hour)	Predicted Level of Local Thermal Variability
0200	Low
0400	Low
0600	Low
0800	Low
1000	Low
1200	High
1400	Medium
1600	Medium
1800	High
2000	Medium
2200	Medium
2400	Low

this measure explained only 5 to 17 percent of the overall variation in average probability of detection. Factors such as target type, target orientation, operational condition, and specific location of a target within the scene must be considered. The predicted class of the metrics should be taken only as a "broadbrush" indicator of conditions. When indicator metrics values are relatively low, indicating a bland scene, probability of detection will on the average tend to be higher than when indicator metrics are relatively high.

Given these considerations, what uses and limitations are recommended for the resulting capability? As with any empirical predictive technique, predictions are generally satisfactory if inputs are within the range of values used to develop the predictor. That is, the predictor should be used to interpolate not extrapolate. Metric class predictions for additional scenes from the five imaging locations under similar weather conditions would expectably be as accurate as those of the test data sets (Table 9). Predictions for conditions outside of the range of those in the database may have lesser accuracy.

Taking an empirical approach toward solving this complex problem was motivated by the belief that a first-principles approach would have involved attacking overwhelming levels of complexity (Sabot and Hall 1990) with the limited resources of this study. The robustness of the resulting empirical predictive technique is unknown but is suspect based on the limited database size consideration described above. The standard solution to this problem is to increase sample size. However, we feel that this approach would yield only

limited return. Field data collection is costly and labor-intensive, and the problem may be too complex to adequately solve with a strictly empirical method. Efforts are currently underway within the Department of Defense to better understand this problem from a first-principles approach. The tri-service Smart Weapons Operability Enhancement Program (SWOE) managed through the U.S. Army Engineer Cold Regions Research and Engineering Laboratory, Hanover, NH, and supported by WES and other agencies, is developing first-principle computerized scene generators for passive thermal and active millimeter wave (MMW) sensor systems. Validated thermal and MMW scene models are scheduled for release by fiscal year 1995. Coupling such a model with a sensor transformation model would produce a synthetic image which could then be processed through an ATR logic set to simulate system performance directly. Sensitivity studies using such a capability would enable the analyst to evaluate the effects of selected scene formation factors directly.

References

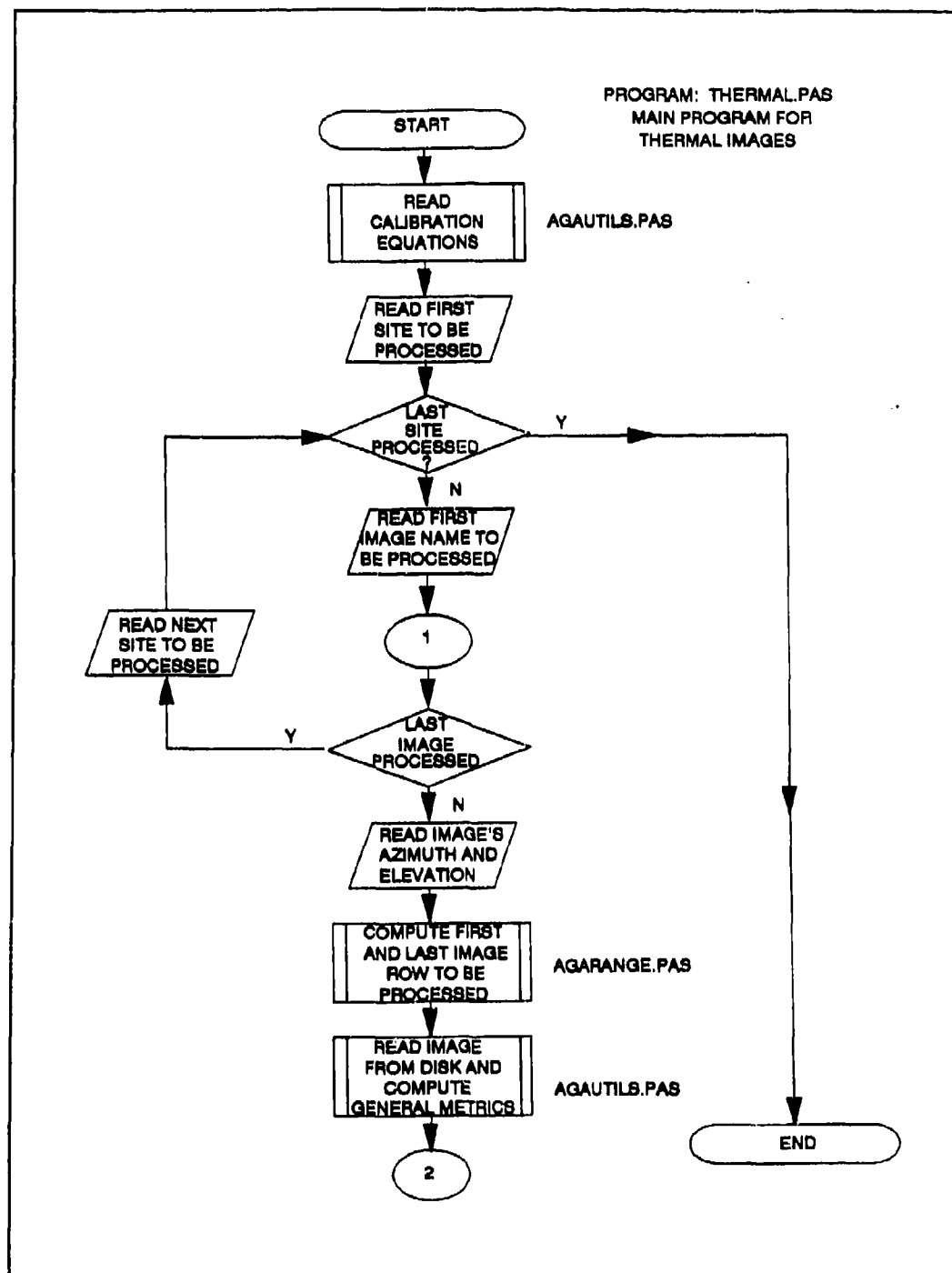
- Aho, A. V., Hopcroft, J. E., and Ullman, J. D. (1983). *Data structures and algorithms*. Addison-Wesley Publishing Co., Reading, MA.
- Beard, J., Clark, L., and Velton, V. (1985). "Characterization of ATR performance in relation to image measurements," unpublished paper, AFWAL/AARF, Wright-Patterson AFB, OH.
- Berry, T., Rivera, S., Jr., and Sabol, B. M. (1993). "Environmental characterization for target acquisition, Report 1: Site description and measurements," Technical Report EL-93-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Breiman, L., Friedman, J. H., Olshen, R. A., and Stone, C. J. (1984). *Classification and regression trees*. Wadsworth and Brooks/Cole Co., Pacific Grove, CA.
- Carlson, G. E., and Radford, D. J. (1986). "Image metrics study," University of Missouri, Electrical Engineering Department report No. CSR 86-2, Rolla, MO.
- Curtis, J. O., and Sabol, B. M. (1993). "Environmental characterization for target acquisition, Report 3: New concepts for evaluating low grazing angle radar measurements," Technical Report EL-93-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Dattatreya, G. R., and Kanel, L. N. (1985). "Decision trees in pattern recognition," *Progress in Pattern Recognition 2*, Kanal and Rosenfeld, Eds., Elsevier Science, 189-239.
- Environmental Research Institute of Michigan. (1985). "Algorithm characterization methodology for the passive Autonomous Infrared Techniques (PAIRSTECH) Program," ERIM report IMT-85-205, Ann Arbor, MI.
- Hetzler, M. C., Smith, R. M., DuVarney, R. C., and Marks, J. M. (1987). *A study of clutter in infrared backgrounds*. SPIE vol. 781, Infrared Image Processing and Enhancement, 10-17.

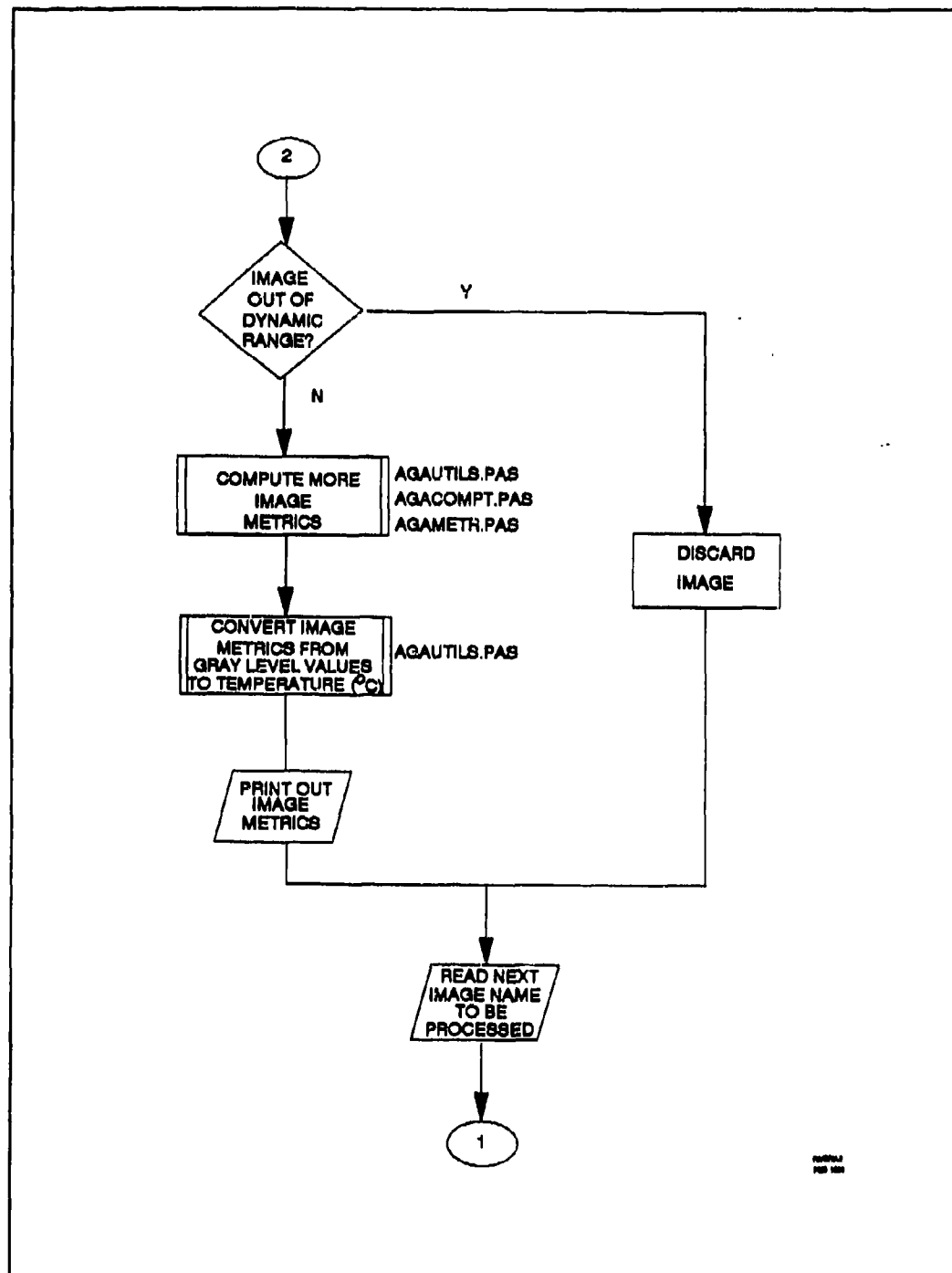
- Lahart, M., Jones, T., and Shields, F. (1988). *Trends and capabilities of ATR algorithm technology for ground vehicles*. Pros. IRIS Targets, Backgrounds, and Discrimination, Vol II, 333-48.
- Peters, R. A. (1988). "Image complexity measurement for predicting target detectability," Ph.D diss., University of Arizona, Tuscon, AZ.
- Press, W. H., et al. (1986). *Numerical recipes*. Cambridge University Press, New York.
- Reynolds, W. R. (1990). *Towards quantifying infrared clutter*. SPIE vol. 1311, Characterization, Propagation, and Simulation of Infrared Scenes, 232-40.
- Sabol, B. M., and Hall, K. G. (1990). Image metrics approach to understanding effects of terrain and environment on performance of thermal target acquisition systems. SPIE vol. 1312, 310-29.
- Safavain, S. R., and Landgrebe, D. (1991). "A survey of decision tree classifier methodology," *IEEE Trans. on Systems, Man, and Cybernetics*, 21(3), 660-74.

Appendix A

Metrics Image Processing

Software Source Code





(SH*)

Program Thermal;

THERMAL 1 OF 4

uses

crt,
agutila,
agrange,
dos,
printer,
agacomp,
agameirc;

var

ans : char;
azimuth : real;
elevation : real;
proceedy : word;
proceedx : word;
proccolr : word;
proccoln : word;
junk : word;
name : image_name;
image : image_array;
min : integer;
max : integer;
mode : integer;
perc95 : integer;
perc05 : integer;
median : integer;
small_glv : real;
large_glv : real;
temp_min : real;
temp_max : real;
temp_mods : real;
temp_05 : real;
temp_95 : real;
temp_med : real;
temp_mean : real;
temp_sd : real;
mean : real;
entropy : real;
std_dev : real;
skewness : real;
kurtosis : real;
upbound : integer;
lowbound : integer;
GLV_hist : GLV_histo;
imgfile : text;
first_caleq : caleq_ptr;
imgfile : text;
outfile : text;
tmp_name : string(11);
data_loc : string(2);
cnt : integer;
code : integer;
view_img : integer;
view : integer;
azel_file : text;
azdeg : integer;
azmin : integer;

```

assec      : integer;
eldeg      : integer;
elmin      : integer;
elasec     : integer;
p          : POINTER;
sites_file : text;
imgs_filename : string(12);
metr_filename : string(12);
str2       : string(2);
windows    : window_array;
clutter    : real;
raynoid    : real;
histo      : histoptr;
cont_img   : cont_array;
wincont    : integer;
maxcont    : integer;
thcent_05  : real;
thcent_25  : real;
thcent_50  : real;
thcent_75  : real;
thcent_95  : real;
flag       : integer;
C)         rns:integer;
           xbyte:C)

begin
  READ_CALEQS(first_caleq);

  assign(sites_file, 'SITE_ALL.TXT');
  reset(sites_file);
  readln(sites_file, imgs_filename, str2, metr_filename);
  while( imgs_filename <> '' ) do
    begin
      assign(imgfile, IMG_FILENAME);
      reset(imgfile);
      readln(imgfile, data_loc);
      cnt := 0;
      readln(imgfile, tmp_name);
      while( tmp_name <> '' ) do
        begin
          assign(outfile, METR_FILENAME);
          (S1-)
          append(outfile);
          (S1+)
          if (IOresult <> 0) then rewrite(outfile);

          cnt := cnt + 1;
          name := copy(tmp_name,1,8) + '.' + copy(tmp_name,10,2);
          writeln(output, 'Processing image #', cnt:4, ' ', data_loc, name);
          GetDate(junk,procmnth,procday,junk);
          GetTime(prochour,procmn,junk,junk);

          if copy(name,1,2) = 'EG' then
            assign(azel_file, 'EG_AZEL.TXT')
          else
            if copy(name,1,2) = 'YG' then
              assign(azel_file, 'YG_AZEL.TXT')
            else
              if copy(name,1,2) = 'AH' then
                assign(azel_file, 'AH_AZEL.TXT')

```

```

else
  if copy(name,1,2) = 'AG' then
    assign(azel_file, 'AG_AZEL.TXT')
  else
    if ( copy(name,1,2) = 'FD' ) and ( copy(name,11,1) = '1' ) then
      assign(azel_file, 'FD_AZEL1.TXT')
    else
      if ( copy(name,1,2) = 'FD' ) and ( copy(name,11,1) = '2' ) then
        assign(azel_file, 'FD_AZEL2.TXT')
      else
        if copy(name,1,2) = 'HL' then
          assign(azel_file, 'HL_AZEL.TXT');

INIT_WINDOWS(windows, name);
Reset(azel_file);
repeat
  val(copy(name,7,2), view_img, code);
  readin(azel_file, view, azdeg, azmin, azsec, eldeg, elmin, elsec)
until ( view = view_img );
close(azel_file);
azimuth := azdeg + (((azsec / 60) + azmin) / 60);
elevation := eldeg + (((elsec / 60) + elmin) / 60);

READ_RANGE(data_loc, name);

() if ( (copy(name,1,2) = 'Y0' ) or (copy(name,1,2) = 'Y9') ) then
  FIND_BOUNDS_YPO(azimuth, elevation, lowbound, upbound, name)
else
  FIND_BOUNDS(lowbound, upbound, name);

if ((lowbound-upbound)<15) then
  begin
    writeLN('bounds restriction');
    HALT;
  end;

MARK(p);
READ_IMAGE(image, name, GLV_hist, min, max, mode, perc95, perc05
, median, mean, entropy, lowbound, upbound
, first_caleq, data_loc);

small_glv := ( (glv_hist[0]+glv_hist[1]+glv_hist[2])/glv_hist[256] ) * 100;
large_glv := ( (glv_hist[253]+glv_hist[254]+glv_hist[255])/glv_hist[256] ) * 100;

if ( (small_glv+large_glv) < 0.50 ) THEN
begin
  temp_min := GLV_TO_TEMP(min, name, first_caleq);
  temp_max := GLV_TO_TEMP(max, name, first_caleq);
  temp_mode := GLV_TO_TEMP(mode, name, first_caleq);
  temp_05 := GLV_TO_TEMP(perc05, name, first_caleq);
  temp_95 := GLV_TO_TEMP(perc95, name, first_caleq);
  temp_med := GLV_TO_TEMP(median, name, first_caleq);
  temp_mean := GLV_TO_TEMP(round(mean), name, first_caleq);

  COMPUTE_STATS(image, std_dev, min, perc95, mean, skewness
, kurtosis, lowbound, upbound);

  temp_sd := DELTA_TEMP(round(std_dev), name, first_caleq);

  COMP_REYNLD(image, name, upbound, lowbound, clutter, reynold, std_dev);

```

```

if clutter < (9999.9) then
    clutter := DELTA_TEMP(round(clutter), name, first_caleq);

New(histo);

CONTRAST2(histo, lowbound, upbound, image, windows, cont_img, name);
mincont := PERCENTILE(histo, 1.0/INT(histo*.bins(256)));
maxcont := PERCENTILE(histo, 0.9995);
thcent_05 := DELTA_TEMP(PERCENTILE(histo, 0.05), name, first_caleq);
thcent_25 := DELTA_TEMP(PERCENTILE(histo, 0.25), name, first_caleq);
thcent_50 := DELTA_TEMP(PERCENTILE(histo, 0.50), name, first_caleq);
thcent_75 := DELTA_TEMP(PERCENTILE(histo, 0.75), name, first_caleq);
thcent_95 := DELTA_TEMP(PERCENTILE(histo, 0.95), name, first_caleq);
flag := 0;

end
else
begin
    temp_min := 99.9;
    temp_max := 99.9;
    temp_mode := 99.9;
    temp_05 := 99.9;
    temp_95 := 99.9;
    temp_med := 99.9;
    temp_mean := 99.9;
    temp_sd := 99.9;
    clutter := 99.9;
    reynold := 99.9;
    thcent_05 := 99.9;
    thcent_25 := 99.9;
    thcent_50 := 99.9;
    thcent_75 := 99.9;
    thcent_95 := 99.9;
    flag := 1
end;
RELEASE(p);

writeln(outfile, name:10, ' ', procdays:4, ' ', procmnth:3, ' ',
    , prochour:4, procmn:4, ' ', azimuth:10:4, ' ',
    , elevation:10:4);
writeln(outfile, upbound:5, ' ', lowbound:5, ' ', temp_mean:10:3
    , ' ', temp_min:10:3, ' ', temp_max:10:3, ' ',
    , temp_mode:10:3, ' ', small_slv:6:2, ' ',
    , large_slv:6:2);
writeln(outfile, temp_05:10:3, ' ', temp_95:10:3, ' ', temp_med:10:3
    , ' ', temp_sd:10:3, ' ', entropy:10:3, ' ',
    , skewness:10:3, ' ', kurtos:10:3);
writeln(outfile, clutter:10:3, ' ', reynold:10:3, ' ', thcent_05:10:3
    , ' ', thcent_25:10:3, ' ', thcent_50:10:3, ' ',
    , thcent_75:10:3, ' ', thcent_95:10:3, ' ', flag:1);

()
close(outfile);
readin(imgfile, tap_name)
end;
close(imgfile);
readin(sites_file, imgs_filename, str2, metr_filename)
end;
close(sites_file)
end.

```

Unit AGAUTILS;

AGAUTILS 1 OF 10

interface

uses

dos,
printer,
ert;

const

numrow = 140;
numcol = 140;
left_junk = 2;
right_junk = 3;

type

imageptr = ^imagerow;
imagerow = record
data : array[1..numcol] of byte;
end;
image_array = array[1..numrow] of imageptr;
image_name = string(12);
videoptr = ^videorow;
videorow = record
disp : array[1..numcol + 3] of byte;
end;
video_array = array[1..numrow + 3] of videoptr;
contptr = ^controw;
controw = record
data : array[1..numcol] of integer;
end;
cont_array = array[1..numrow] of contptr;
GLV_histo = array[0..256] of integer;
string12 = string(12);

calseq_ptr = ^cal_seq;
cal_seq = record
obs : integer;
img_name : string(9);
unit_type : string(3);
slope : real;
intercept : real;
next_calseq : calseq_ptr;
end;

(-----)

procedure read_image(var image : image_array;
name : image_name;
var histo : GLV_histo;
var min : integer;
var max : integer;
var mode : integer;
var perc95 : integer;
var perc05 : integer;
var median : integer;
var mean : real;
var entropy : real;
lo_bound : integer;
upbound : integer;
first_calseq : calseq_ptr;

dataloc : string(2);

AGAUTILS 2 OF 10

```
procedure COMPUTE_STATS(image : image_array;
  var std_dev : real;
  min : integer;
  max : integer;
  mean : real;
  var skewness : real;
  var kurtosis : real;
  lowbound : integer;
  upbound : integer);
```

```
procedure READ_CALEQ( var caleq : caleq_ptr);
```

```
function GLV_to_temp(value : byte;
  imagename : image_name;
  first_caleq : caleq_ptr) : real;
```

```
function DELTA_TEMP(GLV : integer;
  imagename : image_name;
  first_caleq : caleq_ptr) : real;
```

```
procedure READ_IMAGE_INFO( name : image_name;
  var day : integer;
  var month : integer;
  var year : integer;
  var hour : integer;
  var minute : integer;
  var az : real;
  var el : real);
```

```
procedure READ_BASELINE_INFO( name : image_name;
  var day : integer;
  var month : integer;
  var year : integer;
  var hour : integer;
  var minute : integer;
  var az : real;
  var el : real);
```

(.....)

implementation

```
var
  range : double;
  level : double;
  a : double;
  b : double;
  c : double;
  scanner : string(3);
```

(.....)

```
procedure read_image(var image : image_array;
  name : image_name;
  var histo : GLV_histo;
  var min : integer;
  var max : integer;
  var mode : integer;
  var perc95 : integer;
  var perc05 : integer;
  var median : integer;
  var mean : real;
```

```

var entropy      : real;
    lowbound     : integer;
    upbound      : integer;
    first_caleq  : caleq_ptr;
    dataloc      : string12;
(-----)
procedure HEADER(dataloc : string12;
    filename : image_name);
type
    aga_header=record
        image_version : integer;
        Program_version : array[1..6] of char;
        Origin         : integer;
        image_id       : array[1..13] of char;
        dum1           : byte;
        image_drive    : array[1..2] of char;
        dummy          : array[1..36] of byte;
        Comment        : array[1..401] of char;
        Preprocess     : integer;
        Mag_factor     : double;
        Signal_amp     : integer;
        Manipulated    : integer; (boolean, but need to read 2 bytes)
        Snapshot       : integer; (see Manipulate)
        Difference     : integer; (see manipulate)
        dum2           : byte;
        Date           : array[1..3] of integer;
        Time           : array[1..4] of integer;
        Title          : array[1..46] of char;
        Scanner        : array[1..13] of char;
        dum3           : byte;
        Lens            : array[1..13] of char;
        dum4           : byte;
        R              : double;
        B              : double;
        I              : double;
        Dcal           : double;
        alph           : double;
        beta           : double;
        dievel         : double;
        emissivity     : double;
        Area_emiss     : double;
        Object_distance : double;
        Computed_trans : double;
        Estimated_trans : double;
        Atmos_temp     : double;
        Ambient_temp   : double;
        Diffp          : double;
        Diffq          : double;
        dum5           : array[1..64] of byte;
        Level          : double;
        Range          : double;
        Underflow      : integer; (see manipulate)
        Overflow       : integer; (see manipulate)
        dum6           : array[1..64] of byte;
    end;

var
    infile      : file of aga_header;
    e_header    : aga_header;
begin

```



```

    assign(infile, dataloc + filename);
    reset(infile);
    read(infile, a_header);
    range:=a_header.range;
    level:=a_header.level;
    a := a_header.r;
    b := a_header.b;
    c := a_header.f;
    scanner := copy(a_header.scanner,1,2);
    close(infile);
    end; (header)
(-----)
function GLV_PERCENTILE(var histo:GLV_histo;percent:real):integer;
var
    stop_at : integer;
    i       : integer;
    accum   : longint;
begin
    stop_at := round(percent*int(histo[256]));
    accum := 0;
    i := 0;
    while (accum<stop_at) do
        begin
            accum := accum + histo[i];
            i := i + 1;
        end;
        GLV_PERCENTILE := i;
    end;
(-----)

var
    infile : file of byte;
    i,j,k : integer;
    accum : longint;
    histo2 : array[0..512] of integer;
    prob : real;
    junk : byte;
    start;
    current: integer;
    freq_max : integer;

begin

    HEADER(dataloc, name);
    assign(infile, dataloc + name);
    reset(infile);
    for k:=1 to 846 do
        read(infile, junk);
    for k := 1 to numrow do
        new(image[k]);

    i:=2; (load image)
    repeat (even rows (1st interlace))
        for j:= 1 to numcol do read(infile, image[i]^data[j]);
        i:=i+2;
    until (i > (numrow + 1));
    i:=1;
    repeat (odd rows (2nd interlace))
        for j:= 1 to numcol do read(infile, image[i]^data[j]);
        i:=i+2;

```

```

until (i > numrow);
close(infile);

min := 255;      (compute image stats on range bounded image)
max := 0;
accum := 0;
for i := 0 to 256 do
  histo[i] := 0;
for i:=upbound to lowbound do
  for j:=(left_junk+1) to (numcol-right_junk-1) do
    begin
      if (image[i]^data[j] > max) then
        max := image[i]^data[j];
      if (image[i]^data[j] < min) then
        min := image[i]^data[j];
      accum := accum + image[i]^data[j];
      histo[image[i]^data[j]] := histo[image[i]^data[j]] + 1;
      histo[256] := histo[256] + 1;
    end;
mean := accum/histo[256];
perc05 := GLV_PERCENTILE(histo,0.05);
median := GLV_PERCENTILE(histo,0.50);
perc95 := GLV_PERCENTILE(histo,0.95);

start:= trunc(5*GLV_TO_TEMP(min,name,first_caleq)); (entropy computation)
for i:=0 to 512 do histo2[i]:=0;
freq_max := 0;
for i := min to max do (compute mode and create thermal histogram with 0.2 deg C bin size)
  begin
    if histo[i] > freq_max then
      begin
        freq_max := histo[i];
        mode := i;
      end;
    current := trunc(5*GLV_TO_TEMP(i,name,first_caleq));
    histo2[current-start] := histo[i] + histo2[current-start];
  end;
entropy := 0.0;
for i:= 0 to 512 do
  begin
    prob := histo2[i]/histo[256];
    if (prob>0) then
      entropy := entropy + (prob*ln(prob));
  end;
entropy := -entropy;
end; (read_binary_image)
(=====)
procedure COMPUTE_STATS(image : image_array;
  var std_dev : real;
  min : integer;
  max : integer;
  mean : real;
  var skewness : real;
  var kurtosis : real;
  lowbound : integer;
  upbound : integer);
var
  i, j, k, l : integer;
  accum1 : real;
  accum2 : real;

```

```

    accum3 : real;
    square : real;
    temp : real;
    numpixel : real;

begin
    accum1 := 0;
    accum2 := 0;
    accum3 := 0;
    numpixel := 0;
    for i := upbound to lowbound do
        for j := 1 to numcol do
            if ((j > left_junk) and (j < numcol - right_junk)) then
                begin
                    numpixel := numpixel + 1;
                    temp := (image[i]^data[j]) - mean;
                    square := sqr(temp);
                    accum1 := accum1 + square;
                    accum2 := accum2 + (square * temp);
                    accum3 := accum3 + (square * square);
                end;
            accum1 := accum1 / (numpixel - 1);
            std_dev := sqrt(accum1);
            accum2 := accum2 / (accum1 * std_dev);
            skewness := accum2 / numpixel;
            accum3 := accum3 / (sqr(accum1));
            kurtosis := (accum3 / numpixel) - 3;
        end;
    end;
    (=====)
    procedure READ_CALEQ( var caleq1 : caleq_ptr);
    var
        infile : text;
        curr_caleq : caleq_ptr;
        blank3 : string(3);
        blank35 : string(35);
        blank32 : string(32);
        obs : string(3);
        img_name : string(9);
        unit_type : string(3);
        slope : string(6);
        intercept : string(7);
        code : integer;

    begin
        new(caleq1);
        curr_caleq := caleq1;
        assign(infile, 'cal_eqs.txt');
        reset(infile);
        readln(infile, blank3, obs, blank3, img_name, blank35,
            , unit_type, blank32, slope, blank3, intercept);

        while( obs <> '' ) do
            begin
                val(obs, curr_caleq^.obs, code);
                curr_caleq^.img_name := img_name;
                curr_caleq^.unit_type := unit_type;
                val(slope, curr_caleq^.slope, code);
                val(intercept, curr_caleq^.intercept, code);
            end;
        end;
    end;

```

```

        readln(infile, blank3, obs, blank3, img_name, blank33
            , unit_type, blank32, slope, blank3, intercept);

        if ( obs <> '' ) then
            begin
                new(curr_caleq^.next_caleq);
                curr_caleq := curr_caleq^.next_caleq
            end
        else
            curr_caleq^.next_caleq := NIL;

    end;

    close(infile);

end;
=====
function GLV_to_Temp(value      : byte;
                    imagename   : image_name;
                    first_caleq : caleq_ptr) : real;

var
    isotherms : real;
    curr_caleq : caleq_ptr;
    eq_found   : boolean;
    obs        : integer;
    unit_type  : string(3);
    slope      : real;
    intercept  : real;
    temp       : real;
    string9    : string(9);
    infile     : text;
    egl_name   : string(11);
    egl_time   : real;
    egl_temp   : real;
    egl_glv    : real;
    egl_rmg    : real;
    egl_slope  : real;

begin
    IF ( COPY(imagename,1,2) <> 'EQ' ) then
        begin
            isotherms := level + range*(127-value)/256;
            if isotherms < 1.0 then isotherms := 1.0;
            curr_caleq := first_caleq;
            repeat

                string9 := copy(imagename,1,6) + copy(imagename,9,11);
                eq_found := ( curr_caleq^.img_name = string9 );
                obs := curr_caleq^.obs;
                unit_type := curr_caleq^.unit_type;
                slope := curr_caleq^.slope;
                intercept := curr_caleq^.intercept;
                curr_caleq := curr_caleq^.next_caleq

            until( (curr_caleq = NIL) or eq_found );

            if not(eq_found) then

```

AGAUTILS 7 OF 10

```

begin
    writeln;
    writeln(output, 'No calibration equation available, check image name.');
```

AGAUTILS 8 OF 10

```

    halt
end
else
begin
    if unit_type = 'ISO' then
        GLV_to_TEMP := isotherm * slope + intercept
    else
        begin
            Temp := b / (ln((a / isotherm) + c)); (Deg K)
            Temp := Temp - 273.15; (Deg C)
            Temp := Temp * slope + intercept; (Deg C)
            GLV_to_Temp := Temp + 273.15 (Deg K)
        end;
    end;
end
else
begin
    assign(infile, 'egl_cal.782');
    egl_name := ' ';
    reset(infile);
    while (imagename <> egl_name) do
        readln(infile, egl_name, egl_time, egl_temp, egl_glv
            , egl_rmg);
    close(infile);
    if (egl_rmg = 2.0) then
        egl_slope := 0.009535
    else if (egl_rmg = 5.0) then
        egl_slope := 0.0207
    else if (egl_rmg = 10.0) then
        egl_slope := 0.0403
    else if (egl_rmg = 20.0) then
        egl_slope := 0.0871;

    GLV_TO_TEMP := 273.15 +
        (egl_slope*value(egl_temp-egl_slope*egl_glv));
end
end;
(=====)
function DELTA_TEMP(GLV : integer;
    imagename : image_name;
    first_caleq : caleq_ptr): real;
begin
    if (GLV<0)
    then DELTA_TEMP:= -(GLV_TO_TEMP(abs(GLV),imagename,first_caleq) - GLV_TO_TEMP(0,imagename,first_caleq))
    else DELTA_TEMP:= GLV_TO_TEMP(GLV,imagename,first_caleq) - GLV_TO_TEMP(0,imagename,first_caleq);
end; (delta_temp)
(=====)
procedure READ_IMAGE_INFO( name : image_name;
    var day : integer;
    var month : integer;
    var year : integer;
    var hour : integer;
    var minute : integer;
    var sz : real;
    var el : real);
    (procedure reads a comma delimited image information file,

```

change to read space delimited format after the DEN/VAL)

AGAUTILS 9 OF 10

```

var
  infile : text;
  code : integer;
  ch, ch1,
    ch2 : string(1);
  junk9 : string(9);
  junk10 : string(10);
  junk4 : string(4);

begin
  assign(infile, name+'.img');
  reset(infile);
  ch := 'b';
  while (ch<>'.') do read(infile, ch);
  read(infile, junk4);
  val(junk4, year, code);
  read(infile, ch, ch1, ch2);
  if ch2='.' then val(ch1, day, code)
    else val(ch1+ch2, day, code);
  if ch2='.' then read(infile, ch1)
    else read(infile, ch, ch1);
  val(ch1, month, code);
  read(infile, ch, ch1, ch2);
  if ch2='.' then val(ch1, hour, code)
    else
      begin
        val(ch1+ch2, hour, code);
        read(infile, ch);
      end;
  read(infile, ch1, ch2);
  val(ch1+ch2, minute, code);
  read(infile, ch, ch1, junk9);
  val(junk9, az, code);
  read(infile, ch, junk10);
  val(junk10, el, code);
  close(infile);
end;
(=====)
procedure READ_BASELINE_INFO( name : image_name;
  var day : integer;
  var month : integer;
  var year : integer;
  var hour : integer;
  var minute : integer;
  var az : real;
  var el : real);
(baseline image information for DEN/VAL 13 Sept 90 baselining)
var
  err : integer;
  view : integer;

begin
  day := 13;
  month := 9;
  year := 1990;
  val(copy(name, 3, 2), hour, err);
  minute := 0;
  val(copy(name, 5, 2), view, err);

```

```

el := 91.333;
case view of
  1: az:=157.0;
  2: az:=159.5;
  3: az:=162.0;
  4: az:=164.5;
  5: az:=167.0;
  6: az:=169.5;
  7: az:=172.0;
  8: az:=190.0;
  9: az:=192.5;
 10: az:=195.0;
 11: az:=197.5;
 12: az:=200.0;
 13: az:=202.5;
 14: begin
      az:=235.333;
      el:= 92.333;
    end;
  else
    begin
      writeln('incorrect view # read from baseline file list');
      HALT;
    end;
  end;
end;
(=====)
end.

```

AGAUTILS 10 OF 10

```

Unit AGARange;

interface

uses
  printer,
  agautils;

const
  hpix_782 = 0.456;
  vpix_782 = 0.456;
  hpix_870 = 0.310;
  vpix_870 = 0.310;
  rngrow   = 140;
  rngcol   = 57;
  numwin   = 15;
  target_width = 6;      (set width of target box in meters)

type
  range_image = array[0..rngrow, 1..rngcol] of integer;
  window_rec = record
    range : integer;
    hsize : integer;
    vsize : integer;
  end;
  window_array = array[0..numwin] of window_rec;

var
  ranges : range_image;
(-----)
procedure read_range(dataloc : string12;
  imagename : image_name);

procedure find_bounds_vps(  sz      : real;
                           el      : real;
                           var lbound : integer;
                           var upbound : integer;
                           imagename : image_name);

procedure find_bounds(var lbound : integer;
  var upbound : integer;
  imagename : image_name);

function get_range(row : integer;
  col : integer;
  imagename : image_name) : integer;

procedure init_windows(var windows : window_array;
  imagename : image_name);

procedure get_window(range : integer;
  windows : window_array;
  var lowrange : integer;
  var uprange : integer;
  var window : window_rec);
(-----)

implementation

```



```
(=====)
```

AGARANGE 2 OF 6

```

procedure read_range(dataloc : string12;
                    imagename : image_name);

var
  i, j : integer;
  infile : file of integer;
  temp : integer;
  agent : integer;
  string25 : string(25);

begin
  if copy(imagename,1,2) = 'EQ' then
    string25 := dataloc + 'EQL' + copy(imagename,7,2) + '.rng'
  else
    if copy(imagename,1,2) = 'YG' then
      string25 := dataloc + 'YPO' + copy(imagename,7,2) + '.rng'
    else
      if copy(imagename,1,2) = 'AH' then
        string25 := dataloc + 'APH' + copy(imagename,7,2) + '.rng'
      else
        if copy(imagename,1,2) = 'AQ' then
          string25 := dataloc + 'APO' + copy(imagename,7,2) + '.rng'
        else
          if ( copy(imagename,1,2) = 'FD') and ( copy(imagename,11,1) = '1' ) then
            string25 := dataloc + 'FTD' + copy(imagename,7,2) + '1' + '.rng'
          else
            if ( copy(imagename,1,2) = 'FD') and ( copy(imagename,11,1) = '2' ) then
              string25 := dataloc + 'FTD' + copy(imagename,7,2) + '2' + '.rng'
            else
              if copy(imagename,1,2) = 'HL' then
                string25 := dataloc + 'HTL' + copy(imagename,7,2) + '.rng';
              else
                assign(infile, string25);
                reset(infile);

                if ( copy(imagename,10,1) = '7' ) then
                  begin
                    ( for AGA782 )
                    for i := 537 downto 1 do
                      begin
                        agent := trunc(i / (537/140));
                        for j := 1 to rngcol do
                          read(infile, ranges[agent, j])
                        end
                      end
                    end
                  else
                    begin
                    ( for AGA870 )
                    for i := 1 to 84 do
                      for j := 1 to rngcol do
                        read(infile, ranges[i,j]);
                      end
                    end
                    for i := 367 downto 1 do
                      begin
                        agent := trunc(i / (367/140));
                        for j := 1 to rngcol do
                          read(infile, ranges[agent, j])
                        end
                      end
                    end
                  end;
                  close(infile);
                end;
              end;
            end;
          end;
        end;
      end;
    end;
  end;
end;

```

```

end;

=====
function get_range(row      : integer;
                  col      : integer;
                  imagename : image_name) : integer;

var
    newcol : integer;
    tmp_var : integer;

begin
    if ( copy(imagename,10,1) = '7' ) then
        newcol := trunc( 2 + (53 * col) / 140 )  ( For AGA782 )
    else
        newcol := trunc( 10 + (37 * col) / 140 );  ( For AGA870 )

    if (newcol < 1) then
        newcol := 1
    else if (newcol > 57) then
        newcol := 57;

    get_range := ranges(row, newcol);
    tmp_var := ranges(row, newcol);

    if ( ( copy(imagename,1,2) = 'YQ' ) or ( copy(imagename,1,2) = 'Yg' ) )
        and (tmp_var < 400) ) then
        get_range:=2000; (----FIX TO FILTER OUT BAD RANGE DATA FOR YPG)
    end;

=====
procedure find_bounds_ypg(  az      : real;
                          el      : real;
                          var lowbound : integer;
                          var upbound  : integer;
                          imagename : image_name);

--(determines range limits of processed imagery to be applied
--for YUMA DEM/Val)
const
    lower = 800;
    upper = 29000;

type
    data_pair = record
        az : integer;
        el : real;
    end;

var
    i,j : integer;
    upper_done : boolean;
    ridge      : array[1..31] of data_pair;
    bottom      : real;

begin
    ridge(1).az := 158 ; ridge(1).el := 92.5;
    ridge(2).az := 160 ; ridge(2).el := 92.6;
    ridge(3).az := 162 ; ridge(3).el := 92.7;
    ridge(4).az := 164 ; ridge(4).el := 92.8;

```

```

ridge[5].az := 166 ; ridge[5].el := 92.6;
ridge[6].az := 168 ; ridge[6].el := 92.6;
ridge[7].az := 170 ; ridge[7].el := 92.5;
ridge[8].az := 172 ; ridge[8].el := 92.5;
ridge[9].az := 174 ; ridge[9].el := 92.5;
ridge[10].az := 176 ; ridge[10].el := 92.4;
ridge[11].az := 178 ; ridge[11].el := 92.1;
ridge[12].az := 180 ; ridge[12].el := 91.8;
ridge[13].az := 182 ; ridge[13].el := 91.8;
ridge[14].az := 184 ; ridge[14].el := 91.7;
ridge[15].az := 186 ; ridge[15].el := 91.7;
ridge[16].az := 188 ; ridge[16].el := 91.6;
ridge[17].az := 190 ; ridge[17].el := 91.9;
ridge[18].az := 192 ; ridge[18].el := 92.1;
ridge[19].az := 194 ; ridge[19].el := 92.1;
ridge[20].az := 196 ; ridge[20].el := 91.9;
ridge[21].az := 198 ; ridge[21].el := 92.1;
ridge[22].az := 200 ; ridge[22].el := 92.0;
ridge[23].az := 202 ; ridge[23].el := 91.8;
ridge[24].az := 204 ; ridge[24].el := 91.9;
ridge[25].az := 206 ; ridge[25].el := 91.7;
ridge[26].az := 208 ; ridge[26].el := 91.9;
ridge[27].az := 210 ; ridge[27].el := 91.3;
ridge[28].az := 212 ; ridge[28].el := 91.0;
ridge[29].az := 214 ; ridge[29].el := 91.1;
ridge[30].az := 216 ; ridge[30].el := 91.0;
ridge[31].az := 218 ; ridge[31].el := 91.0;

upbound := 1;
upper_done := false;
i := 1;
while ridge[i].az < round(az) do i := i + 1;
bottom := ridge[i].el;
i := 1; j := 70;
while not(upper_done) do
begin
if GET_RANGE(i, j, imagename) < upper then
begin
upbound := i;
upper_done := true;
end;
i := i + 1;
end;
if (copy(imagename, 10, 1) = '7') then
lowbound := round((bottom-el)*(1.0/((vpx_782/1000.0)*57.3))) + 70
else
lowbound := round((bottom-el)*(1.0/((vpx_870/1000.0)*57.3))) + 70;

if upbound < 10 then upbound := 10;
if lowbound > 120 then lowbound := 120;
end;

(=====)
procedure find_bounds(var lowbound : integer;
var upbound : integer;
imagename : image_name);
const
lower = 300;
upper = 29000;

```

```

var
  i,j : integer;
  done : boolean;

begin
  done := FALSE;
  i := 1; j := 70;
  while not(done) do
    begin
      if GET_RANGE(i, j, imagename) < upper then
        begin
          upbound := i;
          done := true;
        end;
      i := i + 1;
    end;

    done := FALSE;
    i := 140; j := 70;
    while not(done) do
      begin
        if GET_RANGE(i, j, imagename) > lower then
          begin
            lebound := i;
            done := true;
          end;
        i := i + 1;
      end;

      if upbound < 10 then upbound := 10;
      if lebound > 120 then lebound := 120;
    end;
  end;
  (=====)
  procedure init_windows(var windows : window_array;
    imagename : image_name);
  var
    i : integer;
  begin
    for i := numwin downto 1 do
      with windows[numwin - i] do
        begin
          hsize := 2 * i + 1;
          if ((trunc(i / 2) * 2) = trunc(i / 2)) then
            vsize := i + 1;
          else
            vsize := i;
          if (copy(imagename,10,1) = 'Y') then
            range := trunc(target_width / sin(hsize * (hpix_782 / 1000)));
          else
            range := trunc(target_width / sin(hsize * (hpix_870 / 1000)));
          end;
        end;
      end;
    end;
  end;
  (=====)
  procedure get_window(range : integer;
    windows : window_array;
    var lowrange : integer;
    var uprange : integer;
    var window : window_rec);

  var

```

```

Unit AGAMetric;

Interface

uses
  agautils,
  agarange,
  agatgtin;

const
  histosize = 256;

type
  histoptr = ^histogram;
  histogram = record
    bins : array[-255..255] of integer;
  end;

(-----)
procedure contrast(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : image_array;
  first_tgt : target_ptr;
  imagename : image_name);

procedure contrast2(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : cont_array;
  imagename : image_name);

function GTP(contrast : real;
  histo : histoptr): real;

function GLV_GTP(hot : integer;
  hist : GLV_histo) : real;

function PERCENTILE(var histo : histoptr;
  percent : real): integer;

(-----)
implementation
(=====)
procedure contrast(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : image_array;
  first_tgt : target_ptr;
  imagename : image_name);

type
  tgt_window = record

```

```

x1 : integer;
y1 : integer;
x2 : integer;
y2 : integer;
end;
tgt_array = array(1..20) of tgt_window;
tgt_list = ^tgt_list_rec;
tgt_list_rec = record
    num : integer;
    next : tgt_list;
end;
(-----)
procedure make_tgt_windows(first_tgt : target_ptr;
    var target_windows : tgt_array;
    var num_tgts : integer);

var
    curr_ptr : target_ptr;
    i : integer;

begin
    curr_ptr := first_tgt;
    i := 1;
    while (curr_ptr^.next_tgt <> nil) do
        begin
            target_windows[i].x1 := curr_ptr^.target.centerX - trunc(curr_ptr^.tgtwind.hsize / 2);
            target_windows[i].x2 := curr_ptr^.target.centerX + trunc(curr_ptr^.tgtwind.hsize / 2);
            target_windows[i].y1 := curr_ptr^.target.centerY - trunc(curr_ptr^.tgtwind.vsize / 2);
            target_windows[i].y2 := curr_ptr^.target.centerY + trunc(curr_ptr^.tgtwind.vsize / 2);
            curr_ptr := curr_ptr^.next_tgt;
            i := i + 1;
        end;
        num_tgts := i - 1;
    end;
(-----)
procedure sort_targets(var target_windows : tgt_array;
    num_tgts : integer);

var
    temp_tgt : tgt_window;
    i, j : integer;

begin
    for i := (num_tgts + 1) downto 1 do
        for j := 1 to i do
            if (target_windows[j].y2 > target_windows[j + 1].y2) then
                begin
                    temp_tgt := target_windows[j + 1];
                    target_windows[j + 1] := target_windows[j];
                    target_windows[j] := temp_tgt;
                end;
            end;
        end;
    end;
(-----)
procedure check_target(row : integer;
    window : window_rec;
    var tgtlist : tgt_list;
    num_tgts : integer;
    target_windows : tgt_array);

var

```

```

i      : integer;
top    : integer;
bottom : integer;
current : tgt_list;
begin
    if (tgtlist <> nil) then
        begin
            current := tgtlist;
            while (current <> nil) do
                begin
                    tgtlist := current^.next;
                    dispose(current);
                    current := tgtlist;
                end;
            end;
            new(tgtlist);
            current := tgtlist;
            current^.next := nil;
            i := 1;
            top := row - window.vsize;
            bottom := row + window.vsize;
            for i := 1 to num_tgts do
                begin
                    if ((target_windows[i].y1 >= top) and (target_windows[i].y1 <= bottom)) then
                        begin
                            new(current^.next);
                            current := current^.next;
                            current^.num := i;
                            current^.next := nil;
                        end;
                    if ((target_windows[i].y2 >= top) and (target_windows[i].y2 <= bottom)) then
                        if (current^.num <> i) then
                            begin
                                new(current^.next);
                                current := current^.next;
                                current^.num := i;
                                current^.next := nil;
                            end;
                        end;
                end;
            end;
        end;
    end;
end;
(-----)
procedure update_targets(var target_windows : tgt_array;
                        var num_tgts      : integer;
                        window            : window_rec;
                        row                : integer);

var
    i, j : integer;
    top : integer;
begin
    top := row - window.vsize;
    for i := 1 to num_tgts do
        begin
            if (target_windows[i].y1 < top) then
                begin
                    for j := 1 to num_tgts - 1 do
                        target_windows[j] := target_windows[j + 1];
                    end;
                    num_tgts := num_tgts - 1;
                end;
            end;
        end;
    end;
end;
end;

```

```

(-----)
var
  i, j, k, l      : integer;
  num_tgts        : integer;
  tgtlist         : tgt_list;
  target_windows  : tgt_array;
  accuminner      : longint;
  accumouter      : longint;
  numpixel        : integer;
  meaninner       : real;
  meanouter       : real;
  AGA_Contrast    : integer;
  range           : integer;
  window          : window_rec;
  lowrange        : integer;
  uprange         : integer;
  currtgt         : tgt_list;
  procede         : boolean;
  top             : integer;
  bottom          : integer;
  left            : integer;
  right           : integer;
  current_tgt     : integer;

begin
  for i := -255 to 256 do
    histo^.bins[i] := 0;
  make_tgt_windows(first_tgt, varget_windows, num_tgts);
  sort_targets(target_windows, num_tgts);
  range := get_range(upbound, left_junk, imagename);
  get_window(range, windows, lowrange, uprange, window);
  k := upbound + window.vsize;
  tgtlist := nil;
  for k := upbound to lowbound do
    begin
      check_target(k, window, tgtlist, num_tgts, target_windows);
      range := get_range(k, (left_junk + window.hsize + 1), imagename);
      if (range < lowrange) or (range > uprange) then
        get_window(range, windows, lowrange, uprange, window);
      for l := (left_junk + window.hsize + 1) to (numcol - right_junk + window.hsize) do
        begin
          procede := true;
          currtgt := tgtlist;
          left := l - window.hsize;
          right := l + window.hsize;
          top := k - window.vsize;
          bottom := k + window.vsize;
          while (currtgt^.next <> nil) do      (Identify positions where contrast box overlaps targets)
            begin
              current_tgt := currtgt^.num;
              if ((target_windows[current_tgt].x2 >= left) and (target_windows[current_tgt].x2 <= right)) then
                procede := false;
              if ((target_windows[current_tgt].x1 >= left) and (target_windows[current_tgt].x1 <= right)) then
                procede := false;
              if ((target_windows[current_tgt].y1 >= top) and (target_windows[current_tgt].y1 <= bottom)) then
                procede := false;
              if ((target_windows[current_tgt].y2 >= top) and (target_windows[current_tgt].y2 <= bottom)) then
                procede := false;
              currtgt := currtgt^.next;
            end
          end
        end
      end
    end
  end

```



```

end;
if procede then
begin
  accumulator := 0;
  numpixel := 0;
  range := get_range(k, l, imagename);
  if (range < lowrange) or (range > uprange) then
    get_window(range, windows, lowrange, uprange, window);
  left := l - window.hsize;
  right := l + window.hsize;
  top := k - window.vsize;
  bottom := k + window.vsize;
  for i := (k - window.vsize) to (k + window.vsize) do
    for j := left to right do
      begin
        writeln(output, 'i = ', i:5, ' k = ', k:5, ' j = ', j:5, ' l = ', l:5, ' left = ', left:5,
          ' right = ', right:5);

        accumulator := accumulator + image[i].data[j];
        numpixel := numpixel + 1;
      end;
    end;
  accumulator := 0;
  for i := (k - trunc(window.vsize / 2)) to (k + trunc(window.vsize / 2)) do
    for j := (l - trunc(window.hsize / 2)) to (l + trunc(window.hsize / 2)) do
      accumulator := accumulator + image[i].data[j];
    end;
  accumulator := accumulator - accumulator;
  numpixel := numpixel - (window.vsize * window.hsize);
  meaninner := accumulator / (window.vsize * window.hsize);
  meanouter := accumulator / numpixel;
  AGA_contrast := round(meanouter - meaninner);
  histo^.bins[AGA_contrast] := histo^.bins[AGA_contrast] + 1;
  histo^.bins[256] := histo^.bins[256] + 1;
end;
update_targets(target_windows, num_tpts, window, k);
end;
end;

(=====)
procedure contrast2(var histo : histo_ptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : cont_array;
  imagename : image_name);

var
  i, j, k, l : integer;
  accumulator : longint;
  numpixel : integer;
  meaninner : real;
  meanouter : real;
  AGA_Contrast : integer;
  range : integer;
  window : window_rec;
  lowrange : integer;
  uprange : integer;
  procede : boolean;

```

```

top      : integer;
bottom   : integer;
left     : integer;
right    : integer;
inner_pixels : integer;

begin
  for i := 1 to numrow do
    new(cont_img[i]);
  for i := 1 to numrow do
    for k := 1 to numcol do
      cont_img[i].data[k] := -128;
    for l := -255 to 255 do
      histo^.bins[l] := 0;
    range := get_range(upbound, left_junk, imagename);
    get_window(range, windows, lowrange, uprange, window);
    k := upbound + window.vsize;
    for k := upbound to lowbound do
      begin
        range := get_range(k, (left_junk + window.hsize + 1), imagename);
        if (range < lowrange) or (range > uprange) then
          get_window(range, windows, lowrange, uprange, window);
        for l := (left_junk + window.hsize + 1) to (numcol + right_junk - window.hsize) do
          begin
            left := l - window.hsize;
            right := l + window.hsize;
            top := k - window.vsize;
            bottom := k + window.vsize;
            procede := true; (process all pixels)
            if procede then
              begin
                accumulator := 0;
                numpixel := 0;
                inner_pixels := 0;
                range := get_range(k, l, imagename);
                if (range < lowrange) or (range > uprange) then
                  get_window(range, windows, lowrange, uprange, window);
                left := l - window.hsize;
                right := l + window.hsize;
                top := k - window.vsize;
                bottom := k + window.vsize;
                for i := (k - window.vsize) to (k + window.vsize) do
                  for j := left to right do
                    begin
                      writeln(output, 'i = ', i:5, ' k = ', k:5, ' j = ', j:5, ' l = ', l:5, ' left = ', left:5,
                        ' right = ', right:5);

                      accumulator := accumulator + image[i].data[j];
                      numpixel := numpixel + 1;
                    end;
                accumulator := 0;
                for i := (k - trunc(window.vsize / 2)) to (k + trunc(window.vsize / 2)) do
                  for j := (l - trunc(window.hsize / 2)) to (l + trunc(window.hsize / 2)) do
                    begin
                      inner_pixels := inner_pixels + 1;
                      accumulator := accumulator + image[i].data[j];
                    end;
                accumulator := accumulator - accumulator;
                numpixel := numpixel - inner_pixels;
                meaninner := accumulator / inner_pixels;
              end;
            end;
          end;
        end;
      end;
    end;
  end;
end;

```

```

        meanouter := accumouter / rumpixel;
        AGA_contrast := round(meaninner - meanouter);
        cont_img(k).data[i] := AGA_contrast;
        histo^.bins(AGA_contrast) := histo^.bins(AGA_contrast) + 1;
        histo^.bins(256) := histo^.bins(256) + 1;
    end;
end;
end;
end;
(=====)
function GTP(contrast : real;
             histo : histoptr) : real;

var
    accum : longint;
    temp : real;
    i : integer;

begin
    accum := 0;
    for i := -255 to (round(contrast)-1) do
        accum := accum + histo^.bins[i];
    end;
    temp := accum / histo^.bins(256);
    GTP := temp;
end;
(=====)
function GLV_GTP(hot : integer;
                 hist : GLV_histo) : real;

var
    accum : longint;
    temp : real;
    i : integer;

begin
    accum := 0;
    for i := 0 to hot do
        accum := accum + hist[i];
    end;
    temp := accum / hist(256);
    GLV_GTP := temp;
end;
(=====)
function PERCENTILE(var histo : histoptr;
                    percent : real) : integer;

var
    stop_at : integer;
    i : integer;
    accum : longint;

begin
    stop_at := round(percent*int(histo^.bins(256)));
    accum := 0;
    i := -255;
    while (accum < stop_at) do
        begin
            accum := accum + histo^.bins[i];
            i := i + 1;
        end;
    end;
    PERCENTILE := i;
end; (end percentile)

```

(.....)
end.

AGAMETRIC 8 OF 8

```
unit agacompt;
```

AGACOMPT 1 OF 3

```
interface
```

```
uses
```

```
  dos,  
  crt,  
  agerange,  
  agutils;
```

```
const
```

```
  angle_782 = 0.000456;  
  angle_870 = 0.000310;  
  dia = 16.0;  (size of clutter box in meters)
```

```
type
```

```
  byte_carrier = array[0..10000] of integer;  
  real_carrier = array[0..1000] of real;
```

```
function VARIANCE(data : byte_carrier): real;
```

```
procedure comp_reynld(  image      : image_array;  
                       imagename : image_name;  
                       upbound   : integer;  
                       lowbound  : integer;  
                       var clutter : real;  
                       var reynold : real;  
                       std_dev   : real);
```

```
(-----)
```

```
implementation
```

```
(=====)
```

```
function VARIANCE(data : byte_carrier): real;
```

```
var
```

```
  j : integer;  
  s,p : real;  
  ave : real;  
  svar : real;
```

```
begin
```

```
  s := 0.0;  
  for j := 1 to data[0] do s := s + data[j];  
  ave := s / data[0];  
  svar := 0.0;  
  for j := 1 to data[0] do  
    begin  
      p := sqr(data[j]-ave);  
      svar := svar + p;  
    end;
```

```
  VARIANCE := svar / (data[0]-1);
```

```
end; ( end VARIANCE )
```

```
(-----)
```

```
procedure comp_reynld(  image      : image_array;  
                       imagename : image_name;  
                       upbound   : integer;  
                       lowbound  : integer;  
                       var clutter : real;  
                       var reynold : real;  
                       std_dev   : real);
```

```

var
  byte_dat      : byte_carrier;
  real_dat      : real_carrier;
  size_pix      : real;
  width         : integer;
  vert_boxes    : integer;
  horiz_boxes   : integer;
  residual      : integer;
  row_start     : integer;
  col_start     : integer;
  i,j,lb,jb,k,kb: integer;
  accum         : real;
  range         : integer;

begin
  (based on center image range)
  range := get_range(trunc((lbound+upbound)/2), trunc((numcol+right_junk)/2), imagename);

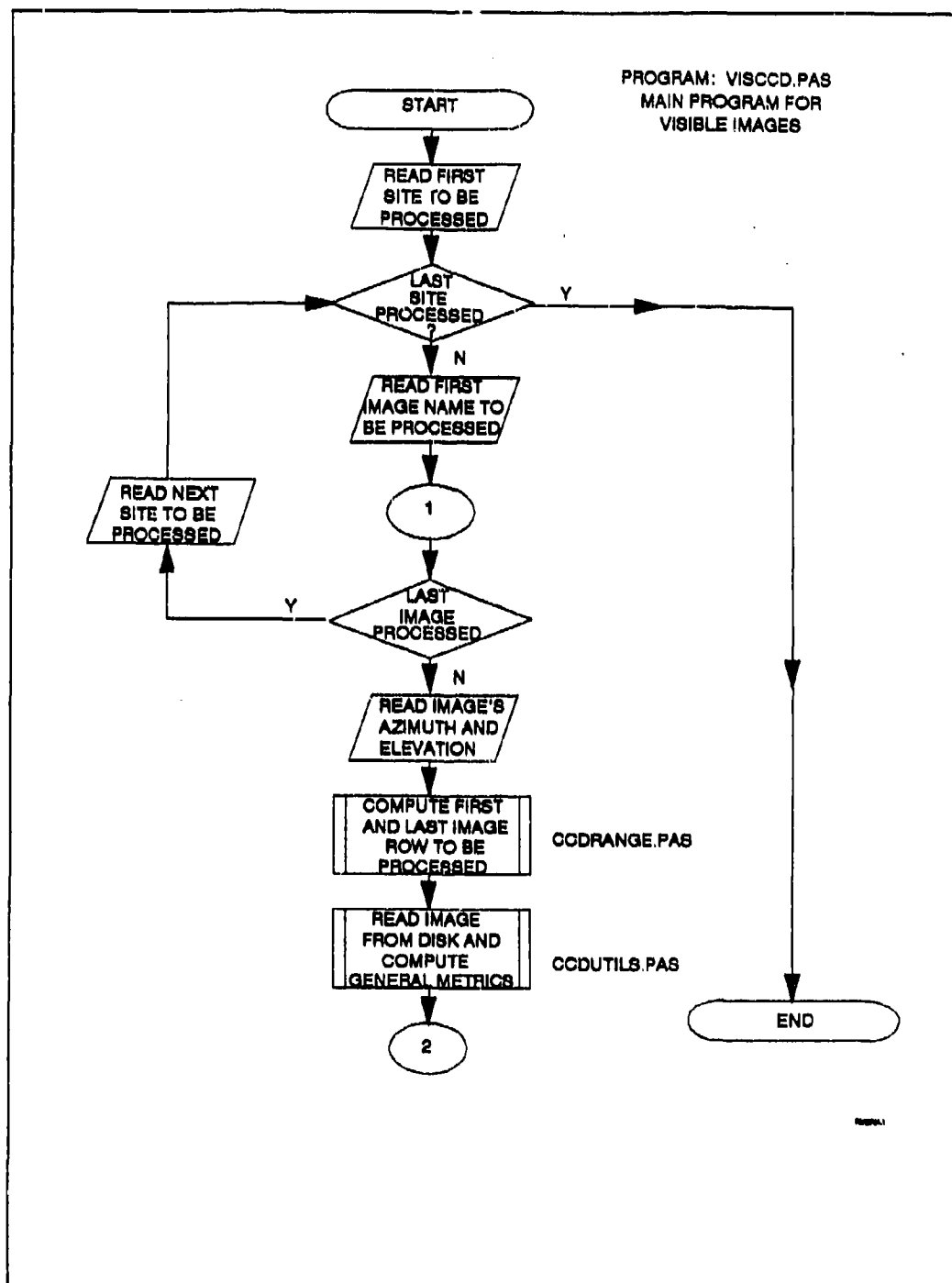
  if ( copy(imagename, 10, 1) = '7' ) then
    size_pix := range * sin( angle_782 ) (nominal pixel size in meters)
  else
    size_pix := range * sin( angle_870 ) (nominal pixel size in meters)
  width := trunc(dim / size_pix); (pixel dimension of unit box)
  vert_boxes := (lbound+upbound) div width; (number of boxes in vertical directions)
  row_start := upbound;
  horiz_boxes := (numcol+right_junk) div width; (number of boxes in vertical direction)
  col_start := 1;
  IF (vert_boxes<>0) and (horiz_boxes<>0) THEN
    begin
      (compute and store variance of each box)
      k := 0; (box counter)
      for i := 1 to vert_boxes do (boxes in vertical)
        for j := 1 to horiz_boxes do (boxes in horizontal)
          begin
            kb := 0; (pixel counter in box)
            (load carrier array and compute box variance)
            for lb := ((i-1)*width+row_start) to (i*width+row_start-1) do
              for jb := ((j-1)*width+col_start) to (j*width-1) do
                begin
                  kb := kb+1;
                  byte_dat[kb] := image[lb]^data[jb];
                end;
            k := k + 1;
            byte_dat[0] := kb; (pixels in box)
            real_dat[k] := VARIANCE(byte_dat);
          end;

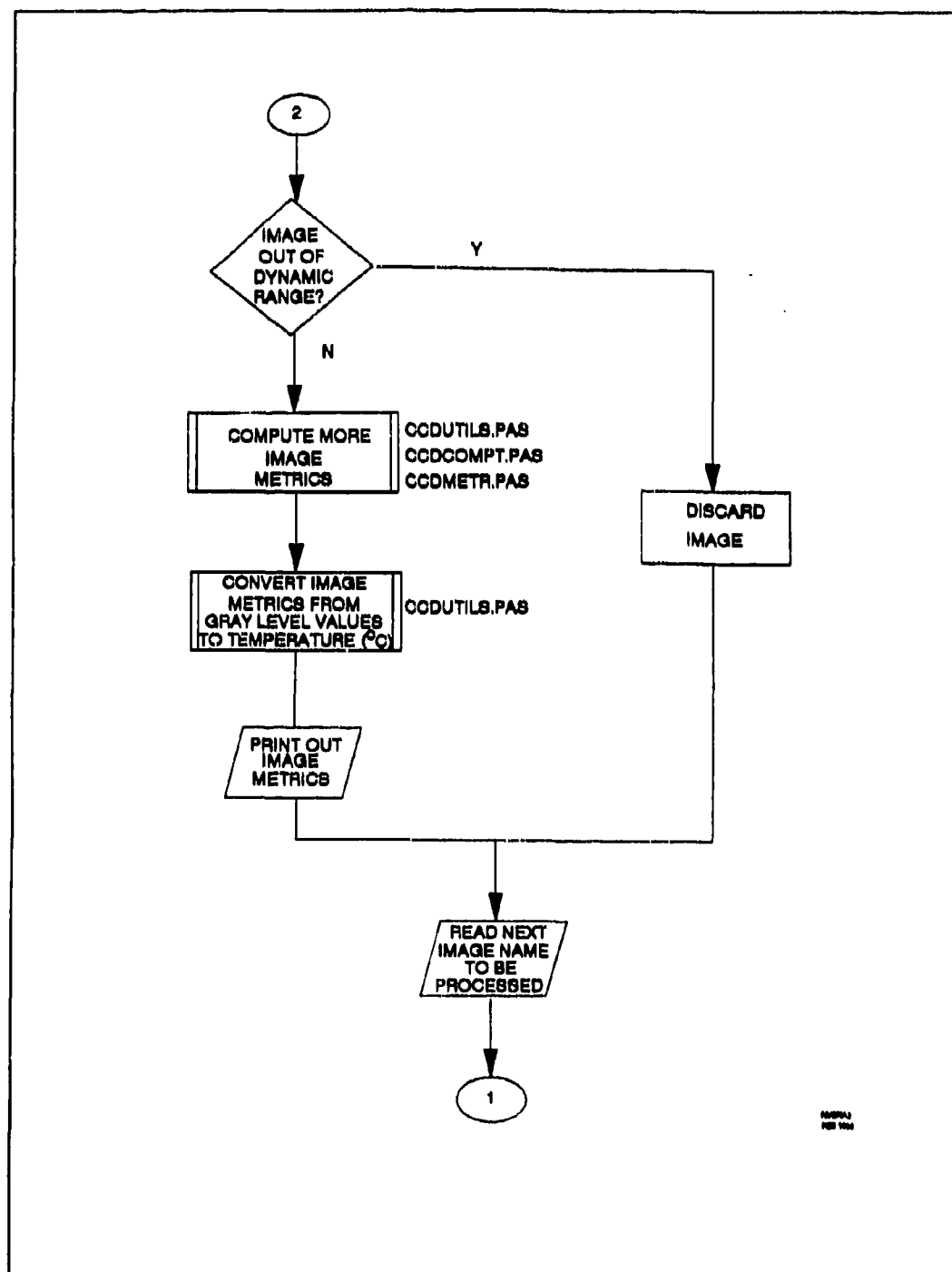
          accum := 0;
          real_dat[0] := int(k);
          for k := 1 to round(real_dat[0]) do accum := accum + real_dat[k];
          clutter := sqrt(accum/real_dat[0]); (convert to temperature)
          if std_dev <> 0 then
            reynold := (std_dev - clutter)/ std_dev
          else
            reynold := 8888.8
          end
        else
          begin
            clutter := 9999.9;
            reynold := 9999.9
          end
        end
      end
    end
  end

```

```
end;  
(.....)  
end.
```

AGACOMPT 3 OF 3





Unit CCDUTILS;

CCDUTILS 1 OF 8

< NOTE: This program normalize GLV to exposure time=0.1 (if exposure time is different from 0.1)>

interface

uses

dos,
art,
tpextmem;

const

numrow = 384;
numcol = 576;
left_junk = 3;
right_junk = 3;

type

GLVptr = ^GLV;
GLV = record
 bline : array(0..16300) of longint;
end;
image_array = array(1..numrow) of hugeptr;
work_row = array(1..1024) of integer;
image_row = array(1..numcol) of integer;
video_array = array(1..numrow) of hugeptr;
video_row = array(1..1024) of byte;
comment_info = array(1..2) of char;
image_comment = record
 zoom : comment_info;
 fstop : comment_info;
 filter : comment_info;
 junk : array(1..94) of char;
end;
image_pos = record
 col : integer;
 row : integer;
end;
image_header = record
 comment : image_comment;
 exptime1 : word;
 exptime2 : word;
 exp_time : longint;
 junk1 : array(1..8) of byte;
 img_time : longint;
 img_org : image_pos;
 img_len : image_pos;
 img_bin : image_pos;
 gain : integer;
 read_rate : integer;
 junk2 : array(1..16) of byte;
 num_frame : integer;
 img_type : integer;
 junk3 : array(1..8) of byte;
end;
image_name = string(8);
string12 = string(12);
string16 = string(16);

(-----)

```

procedure read_image(var image : image_array;
                    name : image_name;
                    var GLVhist : GLVptr;
                    var min : integer;
                    var max : integer;
                    var perc95 : integer;
                    var perc05 : integer;
                    var median : integer;
                    var mode : integer;
                    var mean : real;
                    var zoom : comment_info;
                    var fstep : comment_info;
                    var exptim : real;
                    var filter : comment_info;
                    var start : hugeptr;
                    var entropy : real;
                    lowbound : integer;
                    upbound : integer;
                    data_loc : string16);

```

CCDUTILS 2 OF 8

```

procedure create_display(image : image_array;
                        var display : video_array;
                        var std_dev : real;
                        min : integer;
                        max : integer;
                        mean : real;
                        var skewness : real;
                        var kurtosis : real;
                        lowbound : integer;
                        upbound : integer);

```

```

procedure READ_IMAGE_INFO( name : image_name;
                          var day : integer;
                          var month : integer;
                          var year : integer;
                          var hour : integer;
                          var minute : integer;
                          var az : real;
                          var el : real);

```

```

procedure READ_BASELINE_INFO( name : image_name;
                             var day : integer;
                             var month : integer;
                             var year : integer;
                             var hour : integer;
                             var minute : integer;
                             var az : real;
                             var el : real);

```

(-----)

implementation

(=====)

```

procedure read_image(var image : image_array;
                    name : image_name;
                    var GLVhist : GLVptr;
                    var min : integer;
                    var max : integer;
                    var perc95 : integer;
                    var perc05 : integer;
                    var median : integer;
                    var mode : integer;
                    var mean : real;
                    var zoom : comment_info;

```

```

var fstop   : comment_info;
var exptime : real;
var filter  : comment_info;
var start   : hugeptr;
var entropy : real;
lowbound : integer;
upbound : integer;
data_loc : string16;

(-----)
procedure read_header(data_loc : string16;
  name : image_name;
  var zoom : comment_info;
  var filter : comment_info;
  var exptime : real;
  var fstop : comment_info);

var
  infile : file of image_header;
  header : image_header;
begin
  assign(infile, data_loc + name + '.ccd');
  reset(infile);
  read(infile, header);
  close(infile);
  zoom := header.comment.zoom;
  filter := header.comment.filter;
  fstop := header.comment.fstop;
  header.exptime2 := swap(header.exptime2);
  exptime := header.exptime2 / 10;
end;

(-----)
function GLV_PERCENTILE(var histo : GLVptr;
  n : real;
  percent : real):integer;

var
  stop_at : real;
  i : integer;
  accum : real;
begin
  stop_at := percent*n;
  accum := 0;
  i := 0;
  while (accum < stop_at) do
    begin
      accum := accum + histo.bins[i];
      i := i + 1;
    end;
  GLV_PERCENTILE := i;
end;

(-----)
var
  infile : file of integer;
  storerow : array[0..(numcol - 1)] of integer;
  work : work_row;
  gridsizex : word;
  gridsizey : word;
  i, j : integer;
  accum : real;
  percentil : real;

```

```

middle      : real;
percentil2  : real;
junk        : integer;
imgsize     : word;
done        : boolean;
done1       : boolean;
done2       : boolean;
probab      : real;
percentil   : real;
totalnum    : real;
temp        : integer;
temptr      : hugeptr;
addreca     : longint;
factor      : integer;
freq_max    : longint;

begin
  read_header(data_loc, name, zoom, filter, exptime, fstop);
  factor := round(exptime/0.10);    (exposure time normalization)
  assign(infile, data_loc + name + '.ccd');
  reset(infile);
  for i := 0 to 16300 do GLVhist^.bins[i] := 0;
  for i := 1 to 80 do read(infile, junk);
  gridsize := sizeof(work);
  gridsizek := trunc(gridsize / 1024);
  gridsize := round(gridsize / 2);
  markextmem(start);
  for i := 1 to numrow do
    begin
      image[i] := getextmem(gridsizek);
      if (image[i] = nil) then writeln(output, 'OUT OF RAM');
    end;
    accum := 0;
    max := -2000;
    min := 20000;
    for j := numcol downto 1 do
      for l := 1 to numrow do
        begin
          read(infile, temp);
          temp := (temp div factor);    (normalize GLV to exposure time=0.1)
          if (temp>16299) then temp:=16299;
          if (temp<0) then temp:=0;
          if ((j > left_junk) and (j < numcol - right_junk) and (l <= lowbound) and (l >= upbound)) then
            begin
              if (temp > max) then max := temp;
              if (temp < min) then min := temp;
              accum := accum + temp;
              GLVhist^.bins[temp] := GLVhist^.bins[temp] + 1;
              GLVhist^.bins[16300] := GLVhist^.bins[16300] + 1;
            end;
          moveextmem(image[i], ptrtohuge(addr(work)), gridsize);
          work[j] := temp;
          moveextmem(ptrtohuge(addr(work)), image[i], gridsize);

          address := longint(image[i]);
          temptr := hugeptr(address + (j - 1) * 2);
          moveextmem(ptrtohuge(addr(temp)), temptr, 1);
        end;
      close(infile);
      mean := accum / GLVhist^.bins[16300];
    end;
  end;
end;

```

```

perc05 := GLV_PERCENTILE(GLVhist, int(GLVhist^.bins(16300)), 0.05);
median := GLV_PERCENTILE(GLVhist, int(GLVhist^.bins(16300)), 0.50);
perc95 := GLV_PERCENTILE(GLVhist, int(GLVhist^.bins(16300)), 0.95);
entropy := 0;
freq_max := 0;
for i := min to max do
begin
  if ( glvhist^.bins[i] > freq_max ) then
  begin
    freq_max := glvhist^.bins[i];
    mode := i;
  end;
  prob := GLVhist^.bins[i] / int(GLVhist^.bins(16300));
  if (prob > 0) then entropy := entropy + (prob * ln(prob));
end;
entropy := -entropy;
end;
(=====)
procedure create_display(image : image_array;
  var display : video_array;
  var std_dev : real;
  min : integer;
  max : integer;
  mean : real;
  var skewness : real;
  var kurtosis : real;
  lowbound : integer;
  upbound : integer);
(-----)
function INT_TO_GLV(value : integer;
  min : integer;
  max : integer) : byte;
var
  temp : real;
begin
  temp := ((value - min) / (max - min));
  if (temp > 1) then temp := 1;
  if (temp < 0) then temp := 0;
  int_to_glv := trunc(temp * 63);
end;
(-----)
var
  work : work_row;
  video : video_row;
  i, j : integer;
  gridsize : word;
  videosize : word;
  gridsizek : word;
  accum1 : real;
  accum2 : real;
  accum3 : real;
  square : real;
  temp : real;
  rumpixel : real;
begin
  gridsize := sizeof(work);
  gridsize := trunc(gridsize / 2);
  videosize := sizeof(video);
  gridsizek := trunc(videosize / 1024);

```

```

videoSize := trunc(videoSize / 2);
accum1 := 0;
accum2 := 0;
accum3 := 0;
numpixel := 0;
for i := 1 to 1024 do video[i] := 0;
for i := 1 to numRows do
begin
  display[i] := gettextmem(gridSize);
  if (display[i] = nil) then writein(output, 'OUT OF RAM (CREATE DISPLAY)');
  moveextmem(image[i], ptrtohuge(addr(work)), gridSize);
  for j := 1 to numcol do
  begin
    video[j] := int_to_glv(work[j], min, max);
    if ((j > left_junk) and (j < numcol - right_junk) and (i <= lowbound) and (i >= upbound)) then
    begin
      numpixel := numpixel + 1;
      temp := work[j] * mean;
      square := sqr(temp);
      accum1 := accum1 + square;
      accum2 := accum2 + (square * temp);
      accum3 := accum3 + (square * square);
    end;
  end;
  moveextmem(ptrtohuge(addr(video)), display[i], videoSize);
end;
accum1 := accum1 / (numpixel - 1);
std_dev := sqrt(accum1);
accum2 := accum2 / (accum1 * std_dev);
skewness := accum2 / numpixel;
accum3 := accum3 / (sqr(accum1));
kurtosis := (accum3 / numpixel) - 3;
end;
(=====)
procedure READ_IMAGE_INFO(  name : image_name;
                           var day  : integer;
                           var month: integer;
                           var year : integer;
                           var hour : integer;
                           var minute: integer;
                           var az   : real;
                           var el   : real);
(procedure reads a comma delimited image information file,
change to read space delimited format after the DEM/VAL)

var
  infile : text;
  code   : integer;
  ch, ch1,
  ch2 : string(1);
  junk9 : string(9);
  junk10 : string(10);
  junk4 : string(4);

begin
  assign(infile, name + '.img');
  reset(infile);
  ch := 'b';
  while (ch <> ',') do read(infile, ch);

```

```

read(infile,junk4);
val(junk4,year,code);
read(infile,ch,ch1,ch2);
if ch2=' ' then val(ch1,day,code)
               else val(ch1+ch2,day,code);
if ch2=' ' then read(infile,ch1)
               else read(infile,ch,ch1);
val(ch1,month,code);
read(infile,ch,ch1,ch2);
if ch2=' ' then val(ch1,hour,code)
               else
               begin
                 val(ch1+ch2,hour,code);
                 read(infile,ch);
               end;
read(infile,ch1,ch2);
val(ch1+ch2,minute,code);
read(infile,ch,ch,junk9);
val(junk9,az,code);
read(infile,ch,junk10);
val(junk10,el,code);
close(infile);
end;
(=====)
procedure READ_BASELINE_INFO( name : image_name;
                             var day : integer;
                             var month : integer;
                             var year : integer;
                             var hour : integer;
                             var minute : integer;
                             var az : real;
                             var el : real);
(baseline image information for DEM/VAL 13 Sept 90 baselining)
var
  err : integer;
  view : integer;

begin
  day := 13;
  month := 9;
  year := 1990;
  val(copy(name,3,2),hour,err);
  minute:= 0;
  val(copy(name,5,2),view,err);
  el := 91.333;
  case view of
    1: az:=157.0;
    2: az:=159.5;
    3: az:=162.0;
    4: az:=164.5;
    5: az:=167.0;
    6: az:=169.5;
    7: az:=172.0;
    8: az:=190.0;
    9: az:=192.5;
   10: az:=195.0;
   11: az:=197.5;
   12: az:=200.0;
   13: az:=202.5;
   14: begin

```



```

        sz:=235.333;
        ol:= 92.333;
        end;
    else
        begin
            writeln('incorrect view # read from baseline file list');
            HALT;
        end;
    end;
end;
(=====)
end.

```

CCDUTILS 8 OF 8

```

(SR-,I-,B-,V-,M-)
Program Vis_CCD;

```

VIS_CCD 1 OF 5

```

uses
  crt,
  dos,
  printer,
  tpextmem,
  ccdutils,
  ccdrange,
  ccdmetric;

var
  p          : pointer;
  test_name  : string[63];
  name       : image_name;
  image      : image_array;
  min        : integer;
  max        : integer;
  perc95     : integer;
  perc05     : integer;
  median     : integer;
  mode       : integer;
  mean       : real;
  zoom       : comment_info;
  fstop      : comment_info;
  exptime    : real;
  filter     : comment_info;
  start      : hugeptr;
  entropy    : real;
  display    : video_array;
  std_dev    : real;
  skewness   : real;
  kurtosis   : real;
  upbound    : integer;
  lowbound   : integer;
  window     : window_array;
  clutter    : real;
  reynold    : real;
  histo      : histoptr;
  cont_img   : video_array;
  mincont    : integer;
  maxcont    : integer;
  cont05     : integer;
  cont25     : integer;
  cont50     : integer;
  cont75     : integer;
  cont95     : integer;
  junk       : word;
  precmonth  : word;
  precday    : word;
  prechour   : word;
  precmin    : word;
  azimuth    : real;
  elevation  : real;
  uv         : GLVptr;
  small_glv  : real;
  large_glv  : real;
  sites_file : text;
  imgfile    : text;

```

```

outfile      : text;
imgs_filename : string12;
metr_filename : string12;
data_loc     : string16;
str2         : string12;
cnt          : integer;
tap_name     : string12;
code         : integer;
view_img     : integer;
view         : integer;
azel_file    : text;
azdeg        : integer;
azmin        : integer;
assec        : integer;
eldeg        : integer;
elmin        : integer;
elsec        : integer;
flag         : byte;
i            : byte;
exp_time     : text;

begin
  assign(sites_file, 'ALL_CCD.TXT');
  reset(sites_file);
  readln(sites_file, imgs_filename, str2, metr_filename);
  while( imgs_filename <> '' ) do
    begin
      assign(imgfile, INGS_FILENAME);
      reset(imgfile);
      readln(imgfile, data_loc);
      cnt := 0;
      readln(imgfile, name);
      while( name <> '' ) do
        begin
          assign(outfile, METR_FILENAME);
          ($I-)
          append(outfile);
          ($I+)
          if (IResult <> 0) then rewrite(outfile);

          cnt := cnt + 1;
          writeln;
          writeln(output, 'Processing image #', cnt:4, ' ', data_loc, name);
          GetData(junk, procmonth, procdays, junk);
          GetTime(prochour, procmn, junk, junk);

          if copy(name, 1, 2) = 'EG' then
            assign(azel_file, 'EG_AZEL.TXT')
          else
            if copy(name, 1, 2) = 'YG' then
              assign(azel_file, 'YG_AZEL.TXT')
            else
              if copy(name, 1, 2) = 'AH' then
                assign(azel_file, 'AH_AZEL.TXT')
              else
                if copy(name, 1, 2) = 'AG' then
                  assign(azel_file, 'AG_AZEL.TXT')
                else
                  if ( copy(name, 1, 2) = 'PD') and
                     ( (copy(name, 3, 2) = '26') OR (copy(name, 3, 2) = '27')) then

```

```

        assign(azel_file, 'PD_AZEL1.TXT')
    else
        if ( copy(name,1,2) = 'PD' ) and
            ( (copy(name,3,2) = '11') OR (copy(name,3,2) = '12') ) then
            assign(azel_file, 'PD_AZEL2.TXT')
        else
            if copy(name,1,2) = 'HL' then
                assign(azel_file, 'HL_AZEL.TXT');

INIT_WINDOWS(windows);
reset(azel_file);
repeat
    va!(copy(name,7,2), view_img, code);
    readin(azel_file, view, azdeg, azmin, azsec, eldeg, elmin, elsec)
until ( view = view_img );
close(azel_file);
azimuth := azdeg + (((azsec / 60) + azmin) / 60);
elevation := eldeg + (((elsec / 60) + elmin) / 60);

READ_RANGE(data_loc, name);
if ( (copy(name,1,2) = 'YQ') or (copy(name,1,2) = 'YQ') ) then
    FIND_BOUNDS_YPG(azimuth, elevation, lowbound, upbound, name)
else
    FIND_BOUNDS(lowbound, upbound, name);

if ((lowbound-upbound)<60) then
    begin
        writeln('bounds restriction');
        HALT;
    end;

MARK(p);
new(GV);

MARKXTHEM(start);
READ_IMAGE(image, name, GV, min, max, perc95, perc05, median, mode
    , mean, zoom, fstop, exptime, filter, start, entropy
    , lowbound, upbound, data_loc);

small_glv := 0;
large_glv := 0;
for i := 0 to 10 do
    begin
        small_glv := small_glv + gv^.bins[i];
        large_glv := large_glv + gv^.bins[16299-i]
    end;
small_glv := (small_glv / gv^.bins[16300]) * 100;
large_glv := (large_glv / gv^.bins[16300]) * 100;

IF ( (small_glv+large_glv) < 0.50 ) THEN
    begin
        CREATE_DISPLAY(image, display, std_dev, min, perc95, mean, skewness
            , kurtosis, lowbound, upbound);

        new(histo);

        CONTRAST4(histo, lowbound, upbound, image, windows, cont_img
            , name);
    end;

```

VIS_CCD 3 OF 5

```

mincont := PERCENTILE(histo,2.0/int(histo*.bins(8192)));
maxcont := PERCENTILE(histo,0.9995);
cont05 := PERCENTILE(histo,0.05);
cont25 := PERCENTILE(histo,0.25);
cont50 := PERCENTILE(histo,0.50);
cont75 := PERCENTILE(histo,0.75);
cont95 := PERCENTILE(histo,0.95);

IF (trunc(exptime*10) <> 1) THEN
begin
  assign(exp_time, 'EXP_TIME.TXT');
  (B1-)
  append(exp_time);
  (B1+)
  if (IOResult <> 0) then rewrite(exp_time);
  writeln(exp_time, name, ' ', exptime:6:2);
  close(exp_time);
  (NOTE: GLV's are normalized when the image is read.)
end;
flag := 0;
end
else
begin
  mean := 9999;
  min := 9999;
  max := 9999;
  perc05 := 9999;
  perc95 := 9999;
  median := 9999;
  entropy := 9999;
  skewness := 9999;
  kurtosis := 9999;
  mincont := 9999;
  maxcont := 9999;
  cont05 := 9999;
  cont25 := 9999;
  cont50 := 9999;
  cont75 := 9999;
  cont95 := 9999;
  flag := 1;
end;
RELEASEEXTMEM(start);
RELEASE(p);

writeln(outfile, name:10, ' ', procdays:4, ' ', procmnth:3, ' ',
  , procheur:4, ' ', prucmin:4, ' ', azimuth:10:4, ' ',
  , elevation:10:4, ' ', upbound:5, ' ', lowbound:5, ' ',
  , mode:5);
writeln(outfile, mean:7:1, ' ', min:6, ' ', perc05:7, ' ',
  , median:7, ' ', perc95:7, ' ', max:7, ' ', std_dev:9:2,
  , ' ', entropy:10:3);
writeln(outfile, skewness:10:3, ' ', kurtosis:10:3, mincont:7,
  , ' ', cont05:7, ' ', cont25:7, ' ', cont50:7, ' ',
  , cont75:7, ' ', cont95:7, ' ', maxcont:7);
writeln(outfile, small_glv:6:2, ' ', large_glv:6:2, ' ',
  , flag:1, ' ', exptime:6:2);

close(outfile);
readin(imgfile, name)

```

VIS_CCD 4 OF 5

```
end;  
close(imgfile);  
readin(sites_file, imgs_filename, str2, metr_filename)  
end;  
close(sites_file)  
END.
```

VIS_GCD 5 OF 5

```

Unit CCDRange;

Interface

uses
  printer,
  ccutils;

const
  hpix = 0.118;
  vpix = 0.118;
  rrow = 384;
  rncol = 57;
  numin = 50;
  target_width = 6;

type
  range_image = array[1..rrow, 1..rncol] of integer;
  window_rec = record
    range : integer;
    hsize : integer;
    vsize : integer;
  end;
  window_array = array[0..numin] of window_rec;

var
  ranges : range_image;
  (-----)
  procedure read_range( dataloc : string16;
    imagename : image_name);

  procedure find_bounds(var lbound : integer;
    var upbound : integer;
    imagename : image_name);

  procedure find_bounds_ypp( az : real;
    el : real;
    var lbound : integer;
    var upbound : integer;
    imagename : image_name);

  function get_range(row : integer;
    col : integer;
    (imagename : image_name) : integer;

  procedure init_windows(var windows : window_array);

  procedure get_window(range : integer;
    windows : window_array;
    var lowrange : integer;
    var uprange : integer;
    var window : window_rec);
  (-----)
  implementation
  (-----)
  procedure read_range( dataloc : string16;
    imagename : image_name);

  var
    i, j : integer;

```

CCDRANGE 1 OF 5

```

infile : file of integer;
junk : integer;
string26 : string(26);

begin
  if copy(imagename,1,2) = 'EG' then
    string26 := dataloc + 'EGL' + copy(imagename,7,2) + '.rng'
  else
    if copy(imagename,1,2) = 'YG' then
      string26 := dataloc + 'YPG' + copy(imagename,7,2) + '.rng'
    else
      if copy(imagename,1,2) = 'AH' then
        string26 := dataloc + 'APH' + copy(imagename,7,2) + '.rng'
      else
        if copy(imagename,1,2) = 'AG' then
          string26 := dataloc + 'APG' + copy(imagename,7,2) + '.rng'
        else
          if ( copy(imagename,1,2) = 'FD' ) and
             ( (copy(imagename,3,2) = '26') OR (copy(imagename,3,2) = '27')) then
            string26 := dataloc + 'FTD' + copy(imagename,7,2) + '1' + '.rng'
          else
            if ( copy(imagename,1,2) = 'FD' ) and
               ( (copy(imagename,3,2) = '11') OR (copy(imagename,3,2) = '12')) then
              string26 := dataloc + 'FTD' + copy(imagename,7,2) + '2' + '.rng'
            else
              if copy(imagename,1,2) = 'HL' then
                string26 := dataloc + 'HTL' + copy(imagename,7,2) + '.rng';
              else
                assign(infile, string26);
                reset(infile);
                for i := 1 to 76 do
                  for j := 1 to rngcol do read(infile, junk);
                for i := rngrow downto 1 do
                  for j := 1 to rngcol do read(infile, ranges[i, j]);
                close(infile);
              end;
            (=====)
            function get_range(row : integer;
                               col : integer;
                               imagename : image_name) : integer;

            (CONTAINS CHEAP FIX TO FILTER OUT BAD RANGE DATA)
            var
              newcol : integer;
              test : integer;
            begin
              newcol := round(col / '0.0);
              if (newcol < 1) then
                newcol := 1
              else if (newcol > 57) then
                newcol := 57;

              get_range := ranges(row, newcol);
              test := ranges(row, newcol);

              if ( ( copy(imagename,1,2) = 'YG' ) or (copy(imagename,1,2) = 'yg' ) )
                 and (test < 700) ) then
                get_range:=2000; (----FIX TO FILTER OUT BAD RANGE DATA FOR YPG)
            end;
            (=====)

```



```

procedure find_bounds(var lowbound : integer;
                     var upbound : integer;
                     imagename : image_name);

const
  lower = 300;
  upper = 29000;

var
  i, j : integer;
  done : boolean;

begin
  done := FALSE;
  i := 1; j := 70;
  while not(done) do
    begin
      if GET_RANGE(i, j, imagename) < upper then
        begin
          upbound := i;
          done := true;
        end;
      i := i + 1;
    end;

    done := FALSE;
    i := 384; j := 70;
    while not(done) do
      begin
        if GET_RANGE(i, j, imagename) > lower then
          begin
            lowbound := i;
            done := true;
          end;
        i := i - 1;
      end;

      if upbound < 47 then upbound := 47;
      if lowbound > 335 then lowbound := 335;
    end;
  end;
  (*****);
  procedure find_bounds_ypg(  az      : real;
                             el      : real;
                             var lowbound : integer;
                             var upbound : integer;
                             imagename: image_name);
    (determines range limits of processed imagery to be applied
     for YUMA DEM/Val)
  const
    lower = 300;
    upper = 29000;
  type
    data_pair = record
      az : integer;
      el : real;
    end;
  var
    i, j : integer;
    upper_done : boolean;
    ridge : array[1..31] of data_pair;

```

CCDRANGE 3 OF 5

bottom : real;

CCDRANGE 4 OF 5

```
begin
  ridge(1).az := 158 ; ridge(1).el := 92.5;
  ridge(2).az := 160 ; ridge(2).el := 92.6;
  ridge(3).az := 162 ; ridge(3).el := 92.7;
  ridge(4).az := 164 ; ridge(4).el := 92.6;
  ridge(5).az := 166 ; ridge(5).el := 92.6;
  ridge(6).az := 168 ; ridge(6).el := 92.6;
  ridge(7).az := 170 ; ridge(7).el := 92.5;
  ridge(8).az := 172 ; ridge(8).el := 92.5;
  ridge(9).az := 174 ; ridge(9).el := 92.5;
  ridge(10).az := 176 ; ridge(10).el := 92.4;
  ridge(11).az := 178 ; ridge(11).el := 92.1;
  ridge(12).az := 180 ; ridge(12).el := 91.8;
  ridge(13).az := 182 ; ridge(13).el := 91.8;
  ridge(14).az := 184 ; ridge(14).el := 91.7;
  ridge(15).az := 186 ; ridge(15).el := 91.7;
  ridge(16).az := 188 ; ridge(16).el := 91.8;
  ridge(17).az := 190 ; ridge(17).el := 91.9;
  ridge(18).az := 192 ; ridge(18).el := 92.1;
  ridge(19).az := 194 ; ridge(19).el := 92.1;
  ridge(20).az := 196 ; ridge(20).el := 91.9;
  ridge(21).az := 198 ; ridge(21).el := 92.1;
  ridge(22).az := 200 ; ridge(22).el := 92.0;
  ridge(23).az := 202 ; ridge(23).el := 91.6;
  ridge(24).az := 204 ; ridge(24).el := 91.9;
  ridge(25).az := 206 ; ridge(25).el := 91.7;
  ridge(26).az := 208 ; ridge(26).el := 91.5;
  ridge(27).az := 210 ; ridge(27).el := 91.3;
  ridge(28).az := 212 ; ridge(28).el := 91.0;
  ridge(29).az := 214 ; ridge(29).el := 91.1;
  ridge(30).az := 234 ; ridge(30).el := 97.0;
  ridge(31).az := 236 ; ridge(31).el := 97.0;

  upbound := 1;
  upper_done := false;
  i := 1;
  while ridge(i).az < round(az) do i := i + 1;
  bottom := ridge(i).el;
  j := 1;
  while not(upper_done) do
    begin
      if GET_RANGE(i, j, (imagename) < upper then
        begin
          upbound := i;
          upper_done := true;
        end;
      j := j + 1;
    end;
    lowbound := round((bottom - el) * (1.0 / ((vpix / 1000.0) * 57.3))) + 192;
    if upbound < 47 then upbound := 47;
    if lowbound > 335 then lowbound := 335;
  end;
  (=====)
  procedure init_windows(var windows : window_array);
  var
    i : integer;
  begin
```

```

interface

uses
  crt,
  tpeintem,
  ccdutils,
  ccdrange,
  ccdtgtin;

const
  histosize = 16383;

type
  histoptr = ^histogram;
  histogram = record
    bins : array[-8100..8192] of longint;
  end;
  (-----)

procedure contrast(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : video_array;
  first_tgt : target_ptr;
  imagename : image_name);

procedure contrast2(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : video_array;
  imagename : image_name);

procedure contrast3(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : video_array;
  imagename : image_name);

procedure contrast4(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : video_array;
  imagename : image_name);

function GTP( value : real;
  histo : histoptr) : real;

function PERCENTILE(var histo : histoptr;
  percent : real) : integer;

function GLV_GTP(dark : integer;
  hist : GLVptr) : real;

```

```

procedure update_targets(var target_windows : tgt_array;
                        var num_tgts       : integer;
                        window             : window_rec;
                        row                 : integer);

```

CCDMETRC 4 OF 13

```

var
    i, j : integer;
    top : integer;
begin
    top := row - window.vsize;
    for i := 1 to num_tgts do
        begin
            if (target_windows[i].y1 < top) then
                begin
                    for j := 1 to num_tgts - 1 do
                        target_windows[j] := target_windows[j + 1];
                    end;
                    num_tgts := num_tgts - 1;
                end;
            end;
        end;
    end;
end;

```

(-----)

```

var
    i, j, k, l : integer;
    num_tgts    : integer;
    tgtilist    : tgt_list;
    target_windows : tgt_array;
    gridsize    : word;
    videosize   : word;
    videosizek  : word;
    accuminner  : longint;
    accumouter  : longint;
    numpixel    : integer;
    meaninner   : real;
    meanouter   : real;
    CCD_Contrast : integer;
    offset       : integer;
    range        : integer;
    window       : window_rec;
    lowrange     : integer;
    uprange      : integer;
    currtgt      : tgt_list;
    workspace    : array[1..71] of workptr;
    proccode     : boolean;
    top          : integer;
    bottom       : integer;
    left         : integer;
    right        : integer;
    temp1        : integer;
    temptop      : integer;
    tempbottom   : integer;
    windowindex  : integer;
    current_tgt  : integer;
    xcur, ycur   : byte;
    xcur2, ycur2 : byte;
    xcur3, ycur3 : byte;

```

```

begin
    for i := 1 to 71 do
        new(workspace[i]);
    end;
    for i := -8192 to 8192 do

```

```

histo^.bins[i] := 0;
make_tgt_windows(first_tgt, target_windows, num_tgts);
sort_targets(target_windows, num_tgts);
gridsize := sizeof(dataspace);
gridsize := trunc(gridsize / 2);
range := get_range(upbound, left_junk, imagename);
get_window(range, windows, lowrange, uprange, window);
write(output, 'Storing Row ');
xcurl := wherex;
ycurl := wherex;
top := upbound - window.vsize - 2;
bottom := top + 70;
for i := top to bottom do
begin
    gotoxy(xcurl, ycurl);
    write(output, i);
    moveextmem(image[i], ptrtohuge(workspace[i - top + 1]), gridsize);
end;
writein(output);
k := upbound;
offset := window.vsize + 3;
tgtlist := nil;
write(output, 'Processing Row ');
xcurl := wherex;
ycurl := wherex;
while (k <= lowbound) do
begin
    gotoxy(xcurl, ycurl);
    write(output, k, ' offset ', offset, ' Column ');
    xcurl2 := wherex;
    ycurl2 := wherex;
    check_target(k, window, tgtlist, num_tgts, target_windows);
    range := get_range(k, (left_junk + window.hsize + 1), imagename);
    if (range < lowrange) or (range > uprange) then
        get_window(range, windows, lowrange, uprange, window);
    l := left_junk + window.hsize;
    while (l <= (numcol - right_junk - window.hsize)) do
    begin
        procede := true;
        currtgt := tgtlist;
        left := l - window.hsize;
        right := l + window.hsize;
        top := k - window.vsize;
        bottom := k + window.vsize;
        while (currtgt^.next <> nil) do
        begin
            current_tgt := currtgt^.num;
            writein(output, current_tgt, ' ', currtgt^.num);
            if ((target_windows[current_tgt].x2 >= left) and (target_windows[current_tgt].x2 <= right)) then
                procede := false;
            if ((target_windows[current_tgt].x1 >= left) and (target_windows[current_tgt].x1 <= right)) then
                procede := false;
            if ((target_windows[current_tgt].y1 >= top) and (target_windows[current_tgt].y1 <= bottom)) then
                procede := false;
            if ((target_windows[current_tgt].y2 >= top) and (target_windows[current_tgt].y2 <= bottom)) then
                procede := false;
            currtgt := currtgt^.next;
        end;
        if procede then
            begin

```

CCDMETRC 5 OF 13

```

accumouter := 0;
numpixel := 0;
range := get_range(k, l, imagename);
if (range < lowrange) or (range > uprange) then
    get_window(range, windows, lowrange, uprange, window);
gotoxy(xcur2, ycur2);
clear;
write(output, l, ' HSIZE ', window.hsize, ' VSIZE ', window.vsize, ' l ');
xcur3 := wherex;
ycur3 := wherey;
if (offset + window.vsize < 1) then
begin
    tempbottom := k - window.vsize - 1;
    temptop := k + window.vsize;
    for tempi := tempbottom to temptop do
    begin
        gotoxy(xcur3, ycur3);
        windowindex := tempi - tempbottom + 1;
        write(output, tempi, ' ', windowindex);
        moveextmem(image[tempi], ptrtohuge(workspace[windowindex]), gridsiz);
    end;
    offset := window.vsize + 1;
end;
for i := (offset + window.vsize) to (offset + window.vsize) do
begin
    gotoxy(xcur3, ycur3);
    clear;
    write(output, i);
    for j := left to right do
    begin
        accumouter := accumouter + workspace[i].data[j];
        numpixel := numpixel + 1;
    end;
end;
accuminner := 0;
for i := (offset + trunc(window.vsize / 2)) to (offset + trunc(window.vsize / 2)) do
    for j := (l + trunc(window.hsize / 2)) to (l + trunc(window.hsize / 2)) do
        accuminner := accuminner + workspace[i].data[j];
    end;
accumouter := accumouter + accuminner;
numpixel := numpixel + (window.vsize * window.hsize);
meaninner := accuminner / (window.vsize * window.hsize);
meanouter := accumouter / numpixel;
CCD_contrast := round(meanouter - meaninner);
histo.bins(CCD_contrast) := histo.bins(CCD_contrast) + 1;
histo.bins(8192) := histo.bins(8192) + 1;
end;
l := l + 2;
end;
if (offset >= 36) then
begin
    for j := 1 to 70 do
        workspace[j] := workspace(j + 1);
    end;
    moveextmem(image[l], ptrtohuge(workspace[71]), gridsiz);
end
else
    offset := offset + 1;
    k := k + 2;
    update_targets(target_windows, num_tgts, window, k);
end;
writeln(output);

```

```

end;
(=====)
procedure contrast2(var histo : histoptr;
                    lowbound : integer;
                    upbound : integer;
                    image : image_array;
                    window : window_array;
                    var cont_img : video_array;
                    imagename : image_name);

const
    skip = 2;

type
    tgt_window = record
        x1 : integer;
        y1 : integer;
        x2 : integer;
        y2 : integer;
    end;
    tgt_array = array[1..20] of tgt_window;
    workptr = ^dataspace;
    dataspace = record
        data : array[1..1024] of integer;
    end;
    tgt_list = ^tgt_list_rec;
    tgt_list_rec = record
        num : integer;
        next : tgt_list;
    end;

var
    i, j, k, l : integer;
    num_tgts : integer;
    gridsize : word;
    videosize : word;
    videosizek : word;
    accuminner : longint;
    accumouter : longint;
    numpixel : integer;
    meaninner : real;
    meanouter : real;
    CCD_Contrastr : integer;
    offset : integer;
    range : integer;
    window : window_rec;
    lowrange : integer;
    uprange : integer;
    currtgt : tgt_list;
    workspace : array[1..91] of workptr;
    procede : boolean;
    top : integer;
    bottom : integer;
    left : integer;
    right : integer;
    temp1 : integer;
    temptop : integer;
    tempbottom : integer;
    windowindex : integer;
    current_tgt : integer;
   icur, ycur : byte;

```

CCDMETRC 7 OF 13

```

xcur2, ycur2 : byte;
xcur3, ycur3 : byte;

```

CCDMETRC 8 OF 13

```

begin
  for i := 1 to 91 do new(workspace[i]);
  for i := -8100 to 8192 do histo^.bins[i] := 0;
  gridsize := sizeof(dataspace);
  gridsize := trunc(gridsize / 2);
  range := get_range(upbound, left_junk, imagename);
  get_window(range, windows, lowrange, uprange, window);
  xcur3 := wherex;
  ycur3 := wherey;
  top := upbound - window.vsize - 2;
  bottom := top + 90;
  for i := top to bottom do moveextrem(image[i], ptrtohuge(workspace[i - top + 1]), gridsize);
  k := upbound;
  offset := window.vsize + 3;
  write(output, 'Processing Row ');
  xcur := wherex;
  ycur := wherey;
  while (k <= lowbound) do
    begin
      gotoxy(xcur, ycur);
      write(output, k);
      range := get_range(k, (left_junk + window.hsize + 1), imagename);
      if (range < lowrange) or (range > uprange) then get_window(range, windows, lowrange, uprange, window);
      l := left_junk + window.hsize;
      while (l <= (numcol - right_junk - window.hsize)) do
        begin
          left := l - window.hsize;
          right := l + window.hsize;
          top := k - window.vsize;
          bottom := k + window.vsize;
          accumulator := 0;
          numpixel := 0;
          range := get_range(k, l, imagename);
          if (range < lowrange) or (range > uprange) then get_window(range, windows, lowrange, uprange, window);
          if (offset - window.vsize < 1) then
            begin
              tempbottom := k - window.vsize - 1;
              temptop := k + window.vsize;
              for temp := tempbottom to temptop do moveextrem(image[temp],
                ptrtohuge(workspace[window.idx]), gridsize);
              offset := window.vsize + 1;
            end;
          for i := (offset - window.vsize) to (offset + window.vsize) do
            for j := left to right do
              begin
                accumulator := accumulator + workspace[i]^data[j];
                numpixel := numpixel + 1;
              end;
          accumulator := 0;
          for i := (offset - trunc(window.vsize / 2)) to (offset + trunc(window.vsize / 2)) do
            for j := (l - trunc(window.hsize / 2)) to (l + trunc(window.hsize / 2)) do
              accumulator := accumulator + workspace[i]^data[j];
          accumulator := accumulator - accumulator;
          numpixel := numpixel - (window.vsize * window.hsize);
          meaninner := accumulator / (window.vsize * window.hsize);
          meanouter := accumulator / numpixel;
          CCD_contrast := round(meanouter - meaninner);

```



```

    if (CCD_contrast > 8191) then CCD_contrast := 8191;
    if (CCD_contrast < -8100) then CCD_contrast := -8100;
    histo^.bins[CCD_contrast] := histo^.bins[CCD_contrast] + 1;
    histo^.bins[8192] := histo^.bins[8192] + 1;
    l := l + skip;
end;
if (offset >= 46)
then
begin
    for j := 1 to 89 do workspace[j] := workspace[j] + skip;
    moveextmem(image[k+44], ptrtohuge(workspace[90]), gridsize);
    moveextmem(image[k+45], ptrtohuge(workspace[91]), gridsize);
    end
else offset := offset + skip;
k := k + skip;
end;
end;
(=====)
procedure contrast3(var histo : histo_ptr;
                    lowbound : integer;
                    upbound : integer;
                    image : image_array;
                    windows : window_array;
                    var cont_img : video_array;
                    imagename : image_name);

const
    skip = 2;

var
    i, j, lb, jb : integer;
    num_tgts : integer;
    gridsize : word;
    videosize : word;
    videosizek : word;
    accuminner : longint;
    accumouter : longint;
    numpixel : integer;
    meaninner : real;
    meanouter : real;
    CCD_Contrast : integer;
    range : integer;
    window : window_rec;
    lowrange : integer;
    uprange : integer;
    top : integer;
    bottom : integer;
    left : integer;
    right : integer;
    temp1 : integer;
    temptop : integer;
    tempbottom : integer;
    windowindex : integer;
    xcur, ycur : byte;
    workrow : work_row;

begin
    for i := -8100 to 8192 do histo^.bins[i] := 0;
    gridsize := sizeof(workrow);
    gridsize := trunc(gridsize / 2);
    range := get_range(upbound, left_junk, imagename);

```

```

get_window(range, windows, lowrange, uprange, window);
write(output, 'Processing Row ');
xcur := wherex;
ycur := wherex;
i := upbound;
while (i <= lowbound) do
begin
  gotoxy(xcur, ycur);
  write(output, i);
  range := get_range(i, (left_junk + window.hsize + 1), imagename);
  if (range < lowrange) or (range > uprange) then get_window(range, windows, lowrange, uprange, window);
  j := left_junk + window.hsize;
  while (j <= (numcol - right_junk - window.hsize)) do
  begin
    range := get_range(i, j, imagename);
    if (range < lowrange) or (range > uprange) then get_window(range, windows, lowrange, uprange, window);
    left := j - window.hsize;
    right := j + window.hsize;
    top := i - window.vsize;
    bottom := i + window.vsize;
    accumouter := 0;
    numpixel := 0;
    for lb := top to bottom do
    begin
      moveextmem(image[lb], ptrtohuge(addr(workrow)), gridsz);
      for jb := left to right do
      begin
        accumouter := accumouter + workrow[jb];
        numpixel := numpixel + 1;
      end;
    end;
    accuminner := 0;
    for lb := (i - trunc(window.vsize / 2)) to (i + trunc(window.vsize / 2)) do
    begin
      moveextmem(image[lb], ptrtohuge(addr(workrow)), gridsz);
      for jb := (j - trunc(window.hsize / 2)) to (j + trunc(window.hsize / 2)) do
        accuminner := accuminner + workrow[jb];
      end;
      accumouter := accumouter + accuminner;
      numpixel := numpixel + (window.vsize * window.hsize);
      meaninner := accuminner / (window.vsize * window.hsize);
      meanouter := accumouter / numpixel;
      CCD_contrast := round(meanouter - meaninner);
      if (CCD_contrast > 8191) then CCD_contrast := 8191;
      if (CCD_contrast < -8100) then CCD_contrast := -8100;
      histo^.bins[CCD_contrast] := histo^.bins[CCD_contrast] + 1;
      histo^.bins[8192] := histo^.bins[8192] + 1;
      j := j + skip; (column skip)
    end;
    i := i + skip; (row skip)
  end;
end;
end;
=====
procedure contrast4(var histo : histoptr;
  lowbound : integer;
  upbound : integer;
  image : image_array;
  windows : window_array;
  var cont_img : video_array;
  imagename : image_name);

```

```
const
    skip = 3;
```

CCDMETRC 11 OF 13

```
var
```

```

i, j, lb, lb : integer;
num_tgts    : integer;
gridsize    : word;
videosize    : word;
videosizek   : word;
accuminner   : longint;
accumouter   : longint;
numpixel     : integer;
innerpixels  : integer;
outerpixels  : integer;
meaninner    : real;
meanouter    : real;
CCD_Contrast : integer;
range        : integer;
window       : window_rec;
lowrange     : integer;
uprange      : integer;
top          : integer;
bottom       : integer;
left         : integer;
right        : integer;
tempi        : integer;
temptop      : integer;
tempbottom   : integer;
windowindex  : integer;
xcur, ycur   : byte;
workrow      : work_row;
```

```
begin
```

```

for i := -8100 to 8192 do histo^.bins[i] := 0;
gridsize := sizeof(workrow);
gridsize := trunc(gridsize / 2);
range := get_range(upbound, left_junk, imagename);
get_window(range, windows, lowrange, uprange, window);
write(output, 'Processing Row ');
xcur := wherex;
ycur := wherey;
i := upbound;
while (i <= lowbound) do
begin
    gotoxy(xcur, ycur);
    write(output, i);
    range := get_range(i, (left_junk + window.hsize + 1), imagename);
    if (range < lowrange) or (range > uprange) then get_window(range, windows, lowrange, uprange, window);
    j := left_junk + window.hsize;
    while (j <= (numcol + right_junk - window.hsize)) do
    begin
        range := get_range(i, j, imagename);
        if (range < lowrange) or (range > uprange) then get_window(range, windows, lowrange, uprange, window);
        left := j - window.hsize;
        right := j + window.hsize;
        top := i - window.vsize;
        bottom := i + window.vsize;
        accumouter := 0;
        numpixel := 0;
        lb := top;
```

```

while (ib<=bottom) do
  begin
    moveextmem(image[ib],ptrtohuge(addr(workrow)),gridsize);
    jb := left;
    while (jb<=right) do
      begin
        accumouter := accumouter + workrow[jb];
        numpixel := numpixel + 1;
        jb:= jb + skip;
      end;
    ib:= ib + skip;
  end;
  accuminner := 0;
  innerpixels:= 0;
  ib := 1 + trunc(window.vsize/2);
  while (ib<=(1+ trunc(window.vsize / 2))) do
    begin
      moveextmem(image[ib],ptrtohuge(addr(workrow)),gridsize);
      jb := j + trunc(window.hsize/2);
      while (jb<=(j + trunc(window.hsize / 2))) do
        begin
          accuminner := accuminner + workrow[jb];
          innerpixels:= innerpixels + 1;
          jb := jb + skip;
        end;
      ib := ib + skip;
    end;
    accumouter := accumouter + accuminner;
    outerpixels:= numpixel + innerpixels;
    meaninner := accuminner / innerpixels;
    meanouter := accumouter / outerpixels;
    CCD_contrast := round(meanouter - meaninner);
    if (CCD_contrast>8191) then CCD_contrast:=8191;
    if (CCD_contrast<-8100) then CCD_contrast:=-8100;
    histo^.bins[CCD_contrast] := histo^.bins[CCD_contrast] + 1;
    histo^.bins[8192] := histo^.bins[8192] + 1;
    j := j + skip;  (column skip)
  end;
  i := i + skip;  (row skip)
end;
end;
(=====)
function GTP( value : real;
             histo : histoptr) : real;
  (for contrast histogram only)
  var
    accum : longint;
    temp : real;
    i : integer;

  begin
    accum := 0;
    for i := -8100 to round(value) do accum := accum + histo^.bins[i];
    GTP := accum / histo^.bins[8192];
  end;
(=====)
function PERCENTILE(var histo : histoptr;
                   percent : real): integer;
  var
    stop_at : longint;

```

```

i      : integer;
accum  : longint;
begin
stop_at := round(percent*int(histo^.bins[8192]));
accum := 0;
i := 0;
while (accum < stop_at) do
begin
accum := accum + histo^.bins[i];
i := i + 1;
end;
PERCENTILE := i;
end; (percentile)
(=====)
function GLV_GTP(dark      : integer;
hist      : GLVptr) : real;
(computes GTP of darkest pixel on target)
var
accum : longint;
temp  : real;
i     : integer;
begin
accum := 0;
for i := 0 to dark do accum := accum + hist^.bins[i];
temp := accum / hist^.bins[16300];
GLV_GTP := 1.0 - temp;
end;
(=====)
end.

```

CCDMETRC 13 OF 13

```

interface

  uses
    dds,
    crt,
    ccduils,
    ccdrange,
    tpeexam;

  const
    angle = 0.000118;
    dim = 16.0;

  (-----)
  procedure compute_reynold(  image : image_array;
                             var clutter : real;
                             var reynold : real;
                             std_dev : real);

  procedure compute_reynold2( image : image_array;
                              upbound : integer;
                              lowbound : integer;
                              var clutter : real;
                              var reynold : real;
                              std_dev : real);

  (-----)
implementation
  (=====)
  procedure compute_reynold(  image : image_array;
                             var clutter : real;
                             var reynold : real;
                             std_dev : real);

  type sqreal_array = array [1..50, 1..50] of real;
  type sqrint_array = array [1..50, 1..50] of integer;

  var size_pix      : real;
      width         : integer;
      maxrow        : integer;
      maxcol        : integer;
      residual      : integer;
      row_skip      : integer;
      col_skip      : integer;
      row_sqr       : integer;
      col_sqr       : integer;
      first_row     : integer;
      last_row      : integer;
      first_col     : integer;
      last_col      : integer;
      i, j          : integer;
      gridsize      : word;
      sqr_sum       : sqrint_array;
      sqr_clutter   : sqreal_array;
      work          : work_row;
      a, b, c       : real;
      answer        : real;
      acum          : real;
      range         : integer;

```

```

begin

    range := get_range(192,288);
    size_pix := range * angle;
    width := trunc( dim / size_pix);
    maxrow := numrow div width;
    residual := numrow mod width;
    row_skip := residual div 2;
    maxcol := numcol div width;
    residual := numcol mod width;
    col_skip := residual div 2;
    gridsize := sizeof(work);
    gridsize := trunc(gridsize/2);

    for i := 1 to 50 do
        for j := 1 to 50 do
            begin
                sqr_sum[i,j] := 0;
                sqr_clutter[i,j] := 0
            end;

        row_sqr := 1;
        col_sqr := 1;
        first_row := 1 + row_skip;
        last_row := width + row_skip;
        repeat
            for i := first_row to last_row do
                begin
                    moveextmem(image(i),ptrtohuge(addr(work)),gridsize);
                    first_col := 1 + col_skip;
                    last_col := width + col_skip;
                    repeat
                        for j := first_col to last_col do
                            sqr_sum[row_sqr,col_sqr] := sqr_sum[row_sqr,col_sqr] + work[j];
                        first_col := first_col + width;
                        last_col := last_col + width;
                        col_sqr := col_sqr + 1;
                    until( col_sqr > maxcol );
                    col_sqr := 1;
                end;
                first_row := first_row + width;
                last_row := last_row + width;
                row_sqr := row_sqr + 1;
            until( row_sqr > maxrow );

        row_sqr := 1;
        col_sqr := 1;
        first_row := 1 + row_skip;
        last_row := width + row_skip;
        repeat
            for i := first_row to last_row do
                begin
                    moveextmem(image(i),ptrtohuge(addr(work)),gridsize);
                    first_col := 1 + col_skip;
                    last_col := width + col_skip;
                    repeat
                        for j := first_col to last_col do

```

```

var
  byte_dat      : byte_carrier;
  real_dat      : real_carrier;
  size_pix      : real;
  width         : integer;
  vert_boxes    : integer;
  horiz_boxes   : integer;
  residual      : integer;
  row_start     : integer;
  col_start     : integer;
  i,j,lb,jb,k,kb: integer;
  accum         : real;
  range         : integer;
  work          : work_row;
  gridsize      : word;

begin
  range := get_range(192,288);      (based on center image range)
  size_pix := range * angle;        (nominal pixel size in meters)
  width := trunc( dim / size_pix);  (pixel dimension of unit box)
  vert_boxes := (lowbound+upbound) div width;  (number of boxes in vertical direction)
  row_start := upbound;
  horiz_boxes := (numcol-right_junk) div width; (number of boxes in horizontal direction)
  col_start := 1;
  gridsize := sizeof(work);
  gridsize := trunc(gridsize/2);

  (compute and store variance of each box)
  k:=0;                                (box counter)
  for i:=1 to vert_boxes do            (boxes in vertical)

    for j:=1 to horiz_boxes do         (boxes in horizontal)
      begin
        kb:=0;                          (pixel counter in box)
        (load carrier array and compute box variance)
        for lb:=((i-1)*width+row_start) to ((i*width+row_start) do
          begin
            moveextmem(image[lb],ptrtohuge(addr(work)),gridsize);
            for jb:=((j-1)*width+col_start) to (j*width) do
              begin
                kb:=kb+1;
                byte_dat[kb] := work[jb];
              end;
            end;
            k:=k+1;
            byte_dat[0]:=kb;              (pixels in box)
            real_dat[k] := VARIANCE(byte_dat);
          end;
          accum := 0.0;
          real_dat[0]:=int(k);
          for k:=1 to round(real_dat[0]) do accum:=accum+real_dat[k];
          clutter := sqrt(accum/real_dat[0]);
          reynold := (std_dev - clutter)/std_dev;

        end;
      end;
    end;
  end;
  (=====)
end.

```


Appendix B

Terrain Attribute and Scenario Data

SCENARIO				TERRAIN SCENE FEATURE COMPOSITION								TERRAIN G		
VISITED	AZIMUTH	ELEVATION	RANGE	GRASS	MAN MADE	SOIL	ROAD	TREE	WATER	MOUNTAIN	SKY	POLYGONS	TYPES	EDGE
SITE	(DEGREES)	(DEGREES)	(METERS)	(PERCENT)	(PERCENT)	(PERCENT)	(PERCENT)	(PERCENT)	(PERCENT)	(PERCENT)	(PERCENT)	(NUMBER)	(NUMBER)	(DEGREES)
APG	37.00	91.17	560	71.79	4.12	0.00	7.78	5.13	7.83	0.00	3.36	20	6	32.7
APG	39.50	91.17	550	61.37	0.28	0.00	2.76	28.39	7.20	0.00	0.00	14	5	18.7
APG	42.00	91.17	560	65.72	0.55	0.00	1.16	26.55	5.92	0.00	0.10	13	6	15.3
APG	44.50	91.17	550	66.67	1.10	0.71	0.00	23.24	8.04	0.00	0.24	29	6	28.0
APG	47.00	91.17	560	64.45	1.39	2.36	0.00	10.03	21.77	0.00	0.00	24	5	25.2
APG	49.50	91.17	550	66.84	0.82	1.15	2.06	12.86	15.99	0.00	0.28	24	7	23.2
APG	52.00	91.17	550	65.96	0.76	0.68	1.40	9.53	21.17	0.00	0.49	31	7	31.3
APG	54.50	91.17	560	70.76	0.32	0.75	1.51	8.53	14.14	0.00	1.98	14	7	26.0
APG	57.00	91.17	550	73.98	0.15	0.31	1.01	9.38	13.09	0.00	2.08	18	7	27.3
APG	59.50	91.17	550	74.35	0.48	0.00	1.31	9.06	13.09	0.00	1.71	22	6	29.4
APG	62.00	91.17	550	81.37	0.22	0.00	1.31	9.48	6.08	0.00	1.54	19	6	26.7
APG	64.50	91.17	550	84.67	0.00	0.00	1.23	7.09	3.46	0.00	3.56	8	5	17.8
APG	67.00	91.17	550	82.97	0.00	0.00	1.31	2.17	4.93	0.00	8.62	11	5	20.2
APG	69.50	91.17	550	83.74	0.00	0.00	1.39	2.14	6.34	0.00	6.38	8	5	19.1
APG	72.00	91.17	560	75.54	3.07	0.00	4.79	3.51	7.67	0.00	5.42	12	6	25.9
APG	74.50	91.17	560	77.37	0.16	0.00	7.05	3.46	7.82	0.00	4.15	14	6	26.1
APG	77.00	91.17	560	71.79	4.12	0.00	7.78	5.13	7.83	0.00	3.36	20	6	32.7
APG	79.50	91.17	550	77.93	0.00	0.00	3.85	5.74	8.90	0.00	3.58	12	5	22.4
APG	82.00	91.17	550	58.76	1.17	0.00	20.26	17.06	2.14	0.00	0.61	19	6	30.5
APG	84.50	91.17	560	63.25	7.45	0.00	12.14	8.52	8.11	0.00	0.53	22	6	26.7
APG	87.00	91.17	560	77.42	0.00	0.00	0.00	10.99	9.45	0.00	2.13	9	4	13.3
APG	89.50	91.17	560	46.83	0.00	0.00	7.90	42.60	2.11	0.00	0.57	9	5	13.1
APH	297.83	90.75	500	70.56	0.00	0.00	0.00	19.37	0.00	0.00	10.07	3	3	5.5
APH	300.33	90.75	480	69.59	0.07	0.00	3.55	22.48	0.00	0.00	4.37	6	5	12.1
APH	302.83	90.75	510	62.55	0.45	0.00	7.76	19.78	0.00	0.00	9.47	13	5	17.5
APH	305.33	90.75	610	69.64	0.10	0.00	5.89	18.79	0.00	0.00	5.58	8	5	15.9
APH	307.83	90.75	780	67.30	0.00	0.00	7.47	18.16	0.00	0.00	7.08	9	4	20.1
APH	310.33	90.75	820	72.09	0.13	0.00	4.06	17.23	0.00	0.00	6.49	9	5	15.3
APH	312.83	90.75	780	73.75	0.10	0.00	1.15	15.78	0.00	0.00	9.22	7	5	12.2
APH	315.33	90.75	760	73.77	0.13	0.00	0.99	13.43	0.00	0.00	11.69	9	5	14.7
APH	317.83	90.75	760	75.88	0.27	0.00	2.11	9.71	0.00	0.00	12.03	12	5	21.4
APH	320.33	90.75	740	74.17	0.00	0.00	2.85	9.02	0.00	0.00	13.96	6	4	13.0
APH	322.83	90.75	710	52.68	0.47	0.00	4.30	32.82	0.00	0.00	9.73	6	5	10.8
EGL	95.00	91.50	340	37.59	0.86	0.00	0.00	61.55	0.00	0.00	0.00	3	3	4.6
EGL	97.50	91.50	340	42.45	0.90	0.00	0.00	56.66	0.00	0.00	0.00	5	3	7.2
EGL	100.00	91.50	340	56.68	0.79	0.00	0.00	42.52	0.00	0.00	0.00	6	3	12.0
EGL	102.50	91.50	340	68.46	0.55	0.00	0.00	31.00	0.00	0.00	0.00	9	3	13.1
EGL	105.00	91.50	340	66.37	1.06	0.00	0.84	31.73	0.00	0.00	0.00	15	4	19.8
EGL	107.50	91.50	340	73.07	0.52	0.00	0.68	25.74	0.00	0.00	0.00	15	4	18.6
EGL	110.00	91.50	340	77.66	0.56	0.92	0.56	20.29	0.00	0.00	0.00	14	5	18.7
EGL	112.50	91.50	340	69.20	0.24	7.64	0.40	22.52	0.00	0.00	0.00	16	5	21.5
EGL	115.00	91.50	340	76.46	0.00	0.00	0.00	23.54	0.00	0.00	0.00	8	2	18.5
EGL	117.50	91.50	340	79.25	0.44	0.00	0.00	20.17	0.00	0.00	0.15	12	4	18.5
EGL	120.00	91.50	340	70.57	0.14	0.18	0.00	29.12	0.00	0.00	0.00	11	4	12.8
EGL	122.50	91.50	340	67.44	2.30	2.53	0.00	26.54	0.00	0.00	1.19	10	5	20.6
EGL	125.00	91.50	720	72.77	0.36	5.16	0.00	21.72	0.00	0.00	0.00	16	4	14.4
EGL	127.50	91.50	720	71.51	0.23	1.62	0.00	26.65	0.00	0.00	0.00	18	4	24.2

TABLE

		TERRAIN GENERIC						SPECIFIC EDGE MEASURES						
ES) (0	SKY PERCENT)			MAN MADE						MOUNTAIN				
		POLYGONS (NUMBER)	TYPES (NUMBER)	EDGE (DEGREES)	HARD EDGE (DEGREES)	VEGETATION (PERCENT)	GRASS EDGE (DEGREES)	EDGE (DEGREES)	WATER EDGE (DEGREES)	SOIL EDGE (DEGREES)	ROAD EDGE (DEGREES)	TREE EDGE (DEGREES)	EDGE (DEGREES)	SKY EDGE (DEGREES)
50														
37	3.16	20	6	32.750	7.500	76.92	26.77	2.89	5.62	0.00	21.36	5.30	0.00	2.55
66	0.00	14	5	18.737	5.055	89.76	15.46	1.25	6.71	0.00	7.70	2.52	0.00	0.00
94	0.10	13	6	15.366	5.912	92.27	14.08	1.64	5.97	0.00	5.00	3.27	0.00	0.38
20	0.24	29	6	28.094	7.512	89.91	22.75	5.05	9.55	0.97	0.00	13.82	0.00	0.53
52	0.00	24	5	25.220	11.954	74.48	23.45	5.40	12.78	4.11	0.00	2.93	0.00	0.00
75	0.28	24	7	23.252	7.611	79.70	21.36	3.31	6.62	2.23	7.65	3.87	0.00	0.99
51	0.49	31	7	31.373	14.002	75.49	27.53	4.04	12.79	1.57	5.38	4.63	0.00	1.37
36	1.98	14	7	26.051	12.634	79.79	22.71	1.69	10.47	1.87	5.04	5.15	0.00	2.64
50	2.08	18	7	27.336	12.538	83.36	23.72	0.90	10.25	1.28	5.00	5.07	0.00	2.56
61	1.71	22	6	29.450	12.399	83.41	26.37	1.98	10.29	0.00	4.70	5.08	0.00	2.51
65	1.54	19	6	26.761	10.329	90.85	23.91	1.15	8.23	0.00	5.00	5.01	0.00	2.44
64	3.56	8	5	17.865	7.892	91.76	15.11	0.00	5.04	0.00	5.03	5.18	0.00	2.85
12	8.62	11	5	20.264	12.979	85.14	15.03	0.00	10.08	0.00	5.00	5.41	0.00	2.50
98	6.38	8	5	19.112	11.591	85.88	14.10	0.00	9.08	0.00	5.01	5.01	0.00	2.51
61	3.42	12	6	25.998	7.544	79.05	20.48	3.07	5.02	0.00	15.16	5.03	0.00	2.52
50	4.15	14	6	26.161	7.480	80.83	20.98	0.55	5.02	0.00	15.63	5.11	0.00	2.53
53	3.36	20	6	32.750	7.500	76.92	26.77	2.89	5.62	0.00	21.36	5.30	0.00	2.55
29	3.58	12	5	22.453	7.539	83.67	17.42	0.00	5.00	0.00	13.96	5.04	0.00	2.54
91	0.61	19	5	30.529	5.024	75.82	24.13	1.09	4.08	0.00	17.53	8.51	0.00	0.94
82	0.53	22	6	26.723	6.199	71.77	23.52	2.48	5.17	0.00	13.05	5.72	0.00	1.03
57	2.13	9	4	13.391	8.632	88.41	6.61	0.00	6.08	0.00	0.00	9.01	0.00	2.55
86	0.57	9	5	13.182	2.829	89.43	9.66	0.00	2.04	0.00	8.66	5.05	0.00	0.79
86	10.07	3	3	5.557	2.928	89.93	2.63	0.00	0.00	0.00	0.00	5.56	0.00	2.93
90	4.37	6	5	12.186	2.722	92.07	9.37	0.12	0.00	0.00	6.76	5.39	0.00	2.72
88	9.47	13	5	17.586	2.905	82.33	13.47	1.78	0.00	0.00	10.55	6.51	0.00	2.91
89	5.58	8	5	15.990	2.706	88.43	13.06	0.36	0.00	0.00	10.46	5.41	0.00	2.71
99	7.08	9	4	20.188	2.750	85.46	17.44	0.00	0.00	0.00	13.61	5.42	0.00	2.75
65	6.49	9	5	15.389	2.827	89.32	12.13	0.62	0.00	0.00	9.38	5.48	0.00	3.16
95	9.22	7	5	12.299	2.706	89.53	9.59	0.58	0.00	0.00	5.22	5.31	0.00	2.71
82	11.69	9	5	14.765	2.732	87.20	12.03	0.57	0.00	0.00	5.19	5.34	0.00	2.73
49	12.03	12	5	21.493	2.772	85.59	18.72	0.87	0.00	0.00	5.22	5.49	0.00	2.77
85	13.96	6	4	13.882	2.781	83.19	11.10	0.00	0.00	0.00	4.54	5.39	0.00	2.78
34	9.73	6	5	10.849	2.813	85.50	6.59	1.91	0.00	0.00	3.79	6.59	0.00	2.81
95	0.00	3	3	4.605	0.000	99.14	2.56	2.05	0.00	0.00	0.00	4.61	0.00	0.00
82	0.00	5	3	7.234	0.000	99.11	5.09	2.14	0.00	0.00	0.00	7.23	0.00	0.00
78	0.00	6	3	12.895	0.000	99.20	10.52	2.73	0.00	0.00	0.00	12.54	0.00	0.00
89	0.00	9	3	13.182	0.000	99.46	11.38	2.21	0.00	0.00	0.00	10.24	0.00	0.00
23	0.00	15	4	19.878	0.000	98.10	16.94	3.98	0.00	0.00	1.83	11.85	0.00	0.00
14	0.00	15	4	18.689	0.000	98.81	18.05	2.64	0.00	0.00	2.25	9.37	0.00	0.00
12	0.00	14	5	18.723	0.000	97.95	18.51	2.63	0.00	1.02	2.35	7.75	0.00	0.00
61	0.00	16	5	21.514	0.000	91.72	20.93	1.20	0.00	4.96	1.66	9.05	0.00	0.00
50	0.00	8	2	18.512	0.000	100.00	18.51	0.00	0.00	0.00	0.00	8.54	0.00	0.00
25	0.15	12	4	18.561	0.398	99.42	17.88	0.56	0.00	0.00	0.00	13.05	0.00	0.40
82	0.00	11	4	12.850	0.000	99.69	12.43	0.36	0.00	0.62	0.00	12.29	0.00	0.00
86	1.19	10	5	20.625	2.568	93.98	17.18	3.90	0.00	1.65	0.00	10.81	0.00	2.57
	0.00	16	4	14.402	0.000	94.49	9.53	0.76	0.90	8.02	0.00	10.49	0.00	0.00
	0.00	18	4	24.206	0.000	98.16	22.86	0.88	0.90	1.53	0.00	15.30	0.00	0.00

Appendix C

Meteorological and Radiometric Data

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	METEOROLOGICAL DATA					RADIOMETRIC DATA									
		SOLAR RADIATION BEFORE		SOLAR RADIATION BEFORE		SOLAR RADIATION DIFFERENCE 120-HRS.	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND RUSH		BACK- GROUND DIRT		BACK- GROUND SOIL		BACK- GROUND TREE
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)					(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	
12SEP90-00:15	YPG	31.51	0.1	-	-	-	2.87	105.20	41.05	31.22	-	-	-	29.19	34.50	-
12SEP90-00:30	YPG	31.21	0.2	-	-	-	3.34	116.40	41.46	30.91	-	-	-	28.95	34.16	-
12SEP90-00:45	YPG	31.05	0.3	-	-	-	3.03	117.10	40.06	30.50	-	-	-	28.73	33.92	-
12SEP90-01:00	YPG	31.25	0.1	-	-	-	2.96	131.30	37.39	30.08	-	-	-	28.25	33.61	-
12SEP90-01:15	YPG	31.03	0.1	-	-	-	2.18	132.80	36.46	29.83	-	-	-	27.57	33.28	-
12SEP90-01:30	YPG	31.05	0.2	-	-	-	1.86	135.80	35.71	29.14	-	-	-	27.19	32.89	-
12SEP90-01:45	YPG	31.12	-	0.2	0.1	0.3	2.05	97.50	34.78	28.60	-	-	-	26.57	32.53	-
12SEP90-02:00	YPG	30.89	-	-	0.2	0.1	1.81	93.50	34.00	28.34	-	-	-	26.20	32.24	-
12SEP90-02:15	YPG	30.70	-	-	-	0.1	2.40	112.50	34.91	28.11	-	-	-	25.90	31.98	-
12SEP90-02:30	YPG	30.23	0.1	-	-	0.2	1.95	94.30	35.45	27.95	-	-	-	25.89	31.80	-
12SEP90-02:45	YPG	30.65	0.1	-	-	0.1	1.48	94.40	34.40	27.43	-	-	-	25.51	31.29	-
12SEP90-03:00	YPG	30.66	0.1	0.1	0.1	-	1.76	94.20	34.11	27.34	-	-	-	25.18	31.12	-
12SEP90-03:15	YPG	29.91	0.1	0.1	0.1	-	0.97	78.40	35.29	27.16	-	-	-	25.31	30.98	-
12SEP90-03:30	YPG	29.81	0.3	0.1	0.1	0.1	0.74	97.50	35.14	26.73	-	-	-	24.92	30.44	-
12SEP90-03:45	YPG	29.93	0.3	0.3	0.1	-	0.2	82.00	34.68	26.64	-	-	-	24.64	30.25	-
12SEP90-04:00	YPG	28.98	0.4	0.3	0.3	0.1	0.3	2.67	104.60	26.76	-	-	-	24.85	30.25	-
12SEP90-04:15	YPG	29.26	0.4	0.4	0.3	0.1	0.3	2.71	136.40	26.44	-	-	-	24.56	30.00	-
12SEP90-04:30	YPG	29.17	0.3	0.4	0.4	0.3	0.1	0.0	170.60	26.06	-	-	-	24.49	29.75	-
12SEP90-04:45	YPG	28.58	0.5	0.3	0.4	0.3	0.1	0.2	109.00	25.89	-	-	-	24.26	29.54	-
12SEP90-05:00	YPG	28.69	0.5	0.5	0.3	0.4	0.1	0.59	98.00	25.57	-	-	-	23.64	29.14	-
12SEP90-05:15	YPG	28.55	0.3	0.5	0.5	0.4	0.44	80.50	36.52	25.18	-	-	-	23.35	28.77	-
12SEP90-05:30	YPG	28.73	0.5	0.3	0.5	0.3	0.1	0.79	11.99	24.96	-	-	-	23.14	28.57	-
12SEP90-05:45	YPG	28.04	0.5	0.5	0.3	0.5	1.33	347.50	37.41	24.97	-	-	-	23.05	28.52	-
12SEP90-06:00	YPG	28.28	0.6	0.5	0.5	0.5	0.95	5.05	37.30	24.95	-	-	-	23.09	28.46	-
12SEP90-06:15	YPG	28.34	1.7	0.6	0.5	0.3	1.4	36.55	37.32	24.84	-	-	-	23.19	28.21	-
12SEP90-06:30	YPG	27.94	7.4	1.7	0.6	0.5	1.87	8.99	38.86	24.89	-	-	-	23.06	27.94	-
12SEP90-06:45	YPG	28.06	26.1	7.6	1.7	0.5	1.39	23.11	39.02	25.14	-	-	-	23.50	28.21	-
12SEP90-07:00	YPG	28.10	62.9	26.1	7.6	0.6	1.24	9.40	39.64	25.50	-	-	-	24.25	28.33	-
12SEP90-07:15	YPG	27.79	112.1	62.9	26.1	1.7	1.90	337.60	41.40	25.76	-	-	-	24.91	28.16	-
12SEP90-07:30	YPG	28.93	161.9	112.1	62.9	7.6	0.5	54.3	40.57	26.43	-	-	-	25.88	28.45	-
12SEP90-07:45	YPG	29.01	211.8	161.9	112.1	26.1	1.35	88.10	39.00	27.57	-	-	-	27.16	28.54	-
12SEP90-08:00	YPG	29.95	263.1	211.8	161.9	62.9	0.76	86.70	37.91	28.53	-	-	-	28.16	28.42	-
12SEP90-08:15	YPG	31.25	318.0	263.1	211.8	112.1	0.60	77.20	36.67	29.69	-	-	-	29.23	28.78	-
12SEP90-08:30	YPG	31.34	371.6	318.0	263.1	161.9	1.55	91.90	36.10	30.44	-	-	-	30.37	29.56	-

DAY AND TIME OF VISIT COLLECTION SITE		METEOROLOGICAL DATA										RADIOMETRIC DATA									
		AIR					SOLAR					TIME					BACK-				
		TEMP-	SOLAR	RADIATION	15-MINS.	30-MINS.	60-MINS.	120-MINS.	DIFFERENCE	SOLAR-SHED	WIND	WIND	WIND	RELATIVE	WIND	WIND	WIND	WIND	WIND	WIND	WIND
		(DEG. C)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)
12SEP90:08:45	TPC	31.60	423.7	371.6	423.7	371.6	211.8	62.9	211.9	1.63	120.00	35.36	31.57	-	-	-	-	-	-	-	-
12SEP90:09:00	TPC	31.54	476.8	423.7	476.8	423.7	263.1	112.1	211.7	1.77	119.20	36.05	32.66	-	-	-	-	-	-	-	-
12SEP90:09:15	TPC	32.41	522.5	476.8	522.5	476.8	318.0	161.9	204.5	3.10	161.00	37.43	33.95	-	-	-	-	-	-	-	-
12SEP90:09:30	TPC	32.55	570.0	522.5	570.0	522.5	371.6	211.8	198.4	3.43	166.60	38.40	35.49	-	-	-	-	-	-	-	-
12SEP90:09:45	TPC	32.67	612.7	570.0	612.7	570.0	423.7	263.1	189.0	3.45	182.50	38.60	36.56	-	-	-	-	-	-	-	-
12SEP90:10:00	TPC	32.94	657.5	612.7	657.5	612.7	476.8	318.0	182.7	3.71	179.00	38.14	36.80	-	-	-	-	-	-	-	-
12SEP90:10:15	TPC	33.28	693.8	657.5	693.8	657.5	522.5	371.6	171.5	4.66	180.40	37.31	37.64	-	-	-	-	-	-	-	-
12SEP90:10:30	TPC	33.91	734.0	693.8	734.0	693.8	570.0	423.7	164.0	4.30	180.50	36.30	38.25	-	-	-	-	-	-	-	-
12SEP90:10:45	TPC	34.56	770.0	734.0	770.0	734.0	612.7	476.8	157.3	4.06	176.10	35.37	39.45	-	-	-	-	-	-	-	-
12SEP90:11:00	TPC	34.34	798.0	770.0	798.0	770.0	657.5	522.5	140.5	4.89	183.90	35.25	40.08	-	-	-	-	-	-	-	-
12SEP90:11:15	TPC	34.61	825.0	798.0	825.0	798.0	693.8	570.0	131.2	4.73	176.50	35.20	41.31	-	-	-	-	-	-	-	-
12SEP90:11:30	TPC	35.21	849.0	825.0	849.0	825.0	734.0	612.7	115.0	4.72	179.00	34.09	42.36	-	-	-	-	-	-	-	-
12SEP90:11:45	TPC	35.82	866.0	849.0	866.0	849.0	770.0	657.5	96.0	3.46	200.10	33.49	43.19	-	-	-	-	-	-	-	-
12SEP90:12:00	TPC	35.60	877.0	866.0	877.0	866.0	798.0	693.8	79.0	4.05	164.40	34.72	44.41	-	-	-	-	-	-	-	-
12SEP90:12:15	TPC	36.62	886.0	877.0	886.0	877.0	825.0	734.0	63.0	4.99	157.70	33.38	44.36	-	-	-	-	-	-	-	-
12SEP90:12:30	TPC	36.93	903.0	886.0	903.0	886.0	849.0	770.0	54.0	5.49	181.60	31.94	44.89	-	-	-	-	-	-	-	-
12SEP90:12:45	TPC	36.95	904.0	903.0	904.0	903.0	866.0	798.0	38.0	4.96	179.30	30.73	45.47	-	-	-	-	-	-	-	-
12SEP90:13:00	TPC	37.76	909.0	904.0	909.0	904.0	877.0	825.0	32.0	2.77	195.60	27.82	46.24	-	-	-	-	-	-	-	-
12SEP90:13:15	TPC	38.28	905.0	909.0	905.0	904.0	886.0	849.0	17.0	3.37	192.20	24.47	46.65	-	-	-	-	-	-	-	-
12SEP90:13:30	TPC	38.26	897.0	905.0	897.0	904.0	890.0	866.0	-6.0	4.16	181.20	21.92	47.28	-	-	-	-	-	-	-	-
12SEP90:14:00	TPC	38.82	860.0	880.0	860.0	897.0	909.0	888.0	-49.0	3.17	210.90	19.62	47.77	-	-	-	-	-	-	-	-
12SEP90:14:15	TPC	38.91	854.0	860.0	854.0	880.0	905.0	903.0	-71.0	3.41	178.40	19.41	48.42	-	-	-	-	-	-	-	-
12SEP90:14:30	TPC	39.50	816.0	834.0	816.0	860.0	897.0	904.0	-81.0	3.27	196.70	16.83	48.08	-	-	-	-	-	-	-	-
12SEP90:14:45	TPC	39.34	787.0	816.0	787.0	834.0	880.0	909.0	-93.0	2.62	202.80	15.29	49.03	-	-	-	-	-	-	-	-
12SEP90:15:00	TPC	39.88	750.0	787.0	750.0	816.0	860.0	905.0	-110.0	3.36	187.50	15.36	48.55	-	-	-	-	-	-	-	-
12SEP90:15:15	TPC	40.38	708.0	750.0	708.0	787.0	834.0	897.0	-126.0	3.33	218.90	14.53	47.83	-	-	-	-	-	-	-	-
12SEP90:15:30	TPC	40.07	675.7	708.0	675.7	750.0	816.0	886.0	-140.3	2.08	246.30	14.87	48.25	-	-	-	-	-	-	-	-
12SEP90:15:45	TPC	40.66	632.5	675.7	632.5	708.0	787.0	860.0	-154.5	3.36	281.90	10.84	47.39	-	-	-	-	-	-	-	-
12SEP90:16:00	TPC	40.34	580.1	632.5	580.1	675.7	750.0	834.0	-169.9	2.49	299.20	12.67	47.69	-	-	-	-	-	-	-	-
12SEP90:16:15	TPC	40.99	532.5	580.1	532.5	632.5	708.0	816.0	-175.5	2.53	261.30	11.31	46.73	-	-	-	-	-	-	-	-
12SEP90:16:30	TPC	40.37	491.4	532.5	491.4	580.1	675.7	787.0	-194.3	3.17	181.30	11.51	47.81	-	-	-	-	-	-	-	-
12SEP90:16:45	TPC	40.50	431.2	481.4	431.2	532.5	632.5	750.0	-201.3	2.48	163.80	11.40	46.92	-	-	-	-	-	-	-	-
12SEP90:17:00	TPC	40.73	387.7	431.2	387.7	481.4	580.1	708.0	-192.4	2.99	180.70	10.72	46.00	-	-	-	-	-	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA									
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION (W/M ²)				TIME DIFFERENCE (MIN)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND (Deg. C)				BACK- GROUND (Deg. C)					
		15-MINS. BEFORE	30-MINS. BEFORE	60-MINS. BEFORE	120-MINS. BEFORE					DIRT ROAD	GRASS	BUSH	TREE	SOIL	GROUND				
12SEP00:17:15	TPC	41.71	335.9	387.7	431.2	532.5	675.7	-196.6	2.87	261.00	7.94	44.97	-	-	40.21	39.20	-	-	
12SEP00:17:30	TPC	41.37	221.0	335.9	387.7	481.4	632.5	-260.4	2.58	235.50	7.82	44.49	-	-	39.95	39.75	-	-	
12SEP00:17:45	TPC	41.03	165.6	221.0	335.9	431.2	580.1	-265.6	2.94	279.30	7.87	44.16	-	-	39.19	39.64	-	-	
12SEP00:18:00	TPC	41.26	162.2	165.6	221.0	387.7	532.5	-225.5	1.34	226.00	7.76	43.23	-	-	38.27	38.97	-	-	
12SEP00:18:15	TPC	40.49	116.0	162.2	165.6	335.9	481.4	-219.9	2.34	207.30	8.03	42.25	-	-	37.62	39.67	-	-	
12SEP00:18:30	TPC	39.22	62.9	116.0	162.2	221.0	431.2	-158.1	4.00	176.70	10.43	41.48	-	-	36.82	39.86	-	-	
12SEP00:18:45	TPC	38.66	19.4	62.9	116.0	165.6	387.7	-146.2	5.70	172.70	11.30	40.34	-	-	35.80	39.26	-	-	
12SEP00:19:00	TPC	38.18	3.5	19.4	62.9	162.2	335.9	-158.7	6.52	172.60	12.56	39.60	-	-	35.41	39.11	-	-	
12SEP00:19:15	TPC	37.80	8.8	3.5	19.4	116.8	221.0	-115.2	6.19	172.00	14.27	38.90	-	-	35.26	39.05	-	-	
12SEP00:19:30	TPC	38.11	1.1	8.8	3.5	62.9	165.6	-61.8	7.06	171.60	20.47	38.49	-	-	35.09	38.82	-	-	
12SEP00:19:45	TPC	36.50	0.4	1.1	8.8	19.4	162.2	-19.0	7.47	170.90	23.57	38.00	-	-	34.91	38.66	-	-	
12SEP00:20:00	TPC	36.40	2.2	0.4	1.1	3.5	116.0	-1.3	6.62	173.40	25.03	37.46	-	-	34.60	38.39	-	-	
12SEP00:20:15	TPC	35.68	8.4	2.2	0.4	8.8	62.9	-0.4	6.26	178.30	26.31	36.87	-	-	34.14	38.05	-	-	
12SEP00:20:30	TPC	35.64	0.9	8.4	2.2	1.1	19.4	-0.2	6.43	183.60	27.59	36.28	-	-	33.78	37.71	-	-	
12SEP00:20:45	TPC	35.37	0.4	0.9	8.4	0.4	3.5	0.2	5.40	183.00	29.00	35.84	-	-	33.46	37.37	-	-	
12SEP00:21:00	TPC	35.05	0.9	0.4	0.9	2.2	8.8	-1.3	4.73	186.60	30.99	35.28	-	-	32.97	36.99	-	-	
12SEP00:21:15	TPC	34.59	0.3	0.9	0.6	0.4	1.1	-0.1	3.62	186.00	32.95	34.80	-	-	32.75	36.69	-	-	
12SEP00:21:30	TPC	34.20	0.6	0.3	0.9	0.9	0.4	-0.2	4.62	186.00	34.52	34.41	-	-	32.33	36.34	-	-	
12SEP00:21:45	TPC	33.83	0.7	0.6	0.3	0.6	2.2	0.1	5.11	173.10	36.28	33.96	-	-	31.92	36.00	-	-	
12SEP00:22:00	TPC	33.87	0.2	0.7	0.6	0.9	0.4	-0.7	5.06	178.60	37.67	33.67	-	-	31.64	35.73	-	-	
12SEP00:22:15	TPC	33.01	0.3	0.2	0.7	0.3	0.9	-0.0	4.79	163.00	38.25	33.23	-	-	31.07	35.43	-	-	
12SEP00:22:30	TPC	32.75	0.3	0.3	0.2	0.6	0.6	-0.3	3.81	170.10	38.53	32.81	-	-	30.89	35.18	-	-	
12SEP00:22:45	TPC	32.53	0.3	0.3	0.3	0.7	0.9	-0.4	5.17	175.00	38.47	32.44	-	-	30.73	34.88	-	-	
12SEP00:23:00	TPC	32.17	0.3	0.3	0.3	0.2	0.3	0.0	4.17	169.20	38.72	32.13	-	-	30.52	34.55	-	-	
12SEP00:23:15	TPC	31.93	0.4	0.3	0.3	0.3	0.6	0.1	3.31	173.30	38.92	31.70	-	-	29.96	34.21	-	-	
12SEP00:23:30	TPC	31.68	0.3	0.4	0.3	0.3	0.7	0.0	2.50	173.40	39.25	31.38	-	-	29.43	33.93	-	-	
12SEP00:23:45	TPC	31.41	0.4	0.3	0.4	0.3	0.2	0.1	2.17	172.40	39.82	31.12	-	-	28.98	33.70	-	-	
13SEP00:00:00	TPC	31.15	0.4	0.4	0.4	0.3	0.3	0.3	1.98	113.90	40.39	30.81	-	-	28.79	33.52	-	-	
13SEP00:00:15	TPC	31.35	0.2	0.4	0.4	0.4	0.3	-0.2	2.54	130.30	40.07	30.59	-	-	28.76	33.35	-	-	
13SEP00:00:30	TPC	31.07	0.3	0.2	0.4	0.3	0.3	-0.0	2.34	123.10	40.01	30.31	-	-	28.55	33.12	-	-	
13SEP00:00:45	TPC	30.88	0.1	0.3	0.2	0.4	0.3	-0.3	2.14	128.80	39.53	29.91	-	-	28.10	32.86	-	-	
13SEP00:01:00	TPC	30.82	0.2	0.1	0.3	0.4	0.4	-0.2	1.95	119.90	39.09	29.64	-	-	27.85	32.69	-	-	
13SEP00:01:15	TPC	30.79	0.0	0.2	0.1	0.2	0.3	-0.1	0.73	81.90	39.13	29.33	-	-	27.58	32.39	-	-	
13SEP00:01:30	TPC	30.29	0.4	0.0	0.2	0.3	0.4	0.1	2.78	99.30	40.38	29.11	-	-	27.38	32.14	-	-	

DAY AND TIME OF VISITED COLLECTION SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
	AIR					SOLAR RADIATION					SOLAR					TMR.				
	TEMPERATURE (DEG. C)	WIND (M/SEC)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	WIND SPEED (M/SEC)	15-MINS. BEFORE (W/M ²)	30-MINS. BEFORE (W/M ²)	45-MINS. BEFORE (W/M ²)	60-MINS. BEFORE (W/M ²)	75-MINS. BEFORE (W/M ²)	90-MINS. BEFORE (W/M ²)	105-MINS. BEFORE (W/M ²)	120-MINS. BEFORE (W/M ²)	135-MINS. BEFORE (W/M ²)	150-MINS. BEFORE (W/M ²)	165-MINS. BEFORE (W/M ²)	180-MINS. BEFORE (W/M ²)	195-MINS. BEFORE (W/M ²)	210-MINS. BEFORE (W/M ²)	225-MINS. BEFORE (W/M ²)
13SEP00:10:15	34.11	685.5	646.1	606.6	513.4	363.7	172.1	2.83	166.79	33.20	38.09	-	-	-	36.99	31.44	-	-	-	-
13SEP00:10:30	33.73	722.0	685.5	646.1	540.4	414.9	161.6	2.41	186.79	33.56	39.05	-	-	-	37.92	31.60	-	-	-	-
13SEP00:10:45	35.63	754.6	722.0	685.5	606.6	464.9	169.4	3.44	143.28	32.35	39.92	-	-	-	39.35	32.04	-	-	-	-
13SEP00:11:00	35.29	785.0	754.6	722.0	646.1	513.4	138.9	4.15	141.48	31.84	40.88	-	-	-	39.79	32.25	-	-	-	-
13SEP00:11:15	35.26	810.0	785.0	754.6	606.6	560.4	124.5	4.06	147.60	31.51	42.00	-	-	-	41.15	32.88	-	-	-	-
13SEP00:11:30	35.07	835.0	810.0	785.0	722.0	606.6	113.0	4.71	141.48	30.32	42.61	-	-	-	42.09	33.17	-	-	-	-
13SEP00:11:45	35.35	849.0	835.0	810.0	754.6	646.1	95.0	3.74	173.79	30.49	42.50	-	-	-	42.83	33.44	-	-	-	-
13SEP00:12:00	35.54	865.0	849.0	835.0	785.0	685.5	80.0	4.68	176.60	31.39	43.55	-	-	-	43.51	33.70	-	-	-	-
13SEP00:12:15	35.54	877.0	865.0	849.0	810.0	722.0	67.0	3.77	181.90	31.04	44.32	-	-	-	43.98	34.28	-	-	-	-
13SEP00:12:30	35.85	886.0	877.0	865.0	835.0	754.6	49.0	3.47	188.50	29.32	44.84	-	-	-	45.05	34.45	-	-	-	-
13SEP00:12:45	35.79	892.0	886.0	877.0	849.0	785.0	43.0	4.04	175.30	27.05	45.28	-	-	-	45.11	34.63	-	-	-	-
13SEP00:13:00	36.63	886.0	892.0	886.0	865.0	810.0	21.0	2.54	174.20	26.85	46.03	-	-	-	45.93	35.27	-	-	-	-
13SEP00:13:15	36.77	880.0	886.0	892.0	877.0	835.0	3.0	3.80	181.50	26.61	47.01	-	-	-	46.75	35.96	-	-	-	-
13SEP00:13:30	37.15	866.0	880.0	886.0	865.0	849.0	-18.0	3.22	188.90	27.49	47.45	-	-	-	46.79	35.92	-	-	-	-
13SEP00:13:45	37.39	854.0	866.0	880.0	892.0	865.0	-38.0	3.21	181.30	26.42	47.11	-	-	-	46.62	36.19	-	-	-	-
13SEP00:14:00	38.00	837.0	854.0	866.0	886.0	877.0	-49.0	4.07	188.30	25.39	47.56	-	-	-	46.97	36.33	-	-	-	-
13SEP00:14:15	37.80	814.0	837.0	854.0	866.0	865.0	-66.0	5.39	174.10	24.85	47.96	-	-	-	46.86	36.80	-	-	-	-
13SEP00:14:30	38.51	791.0	814.0	837.0	854.0	892.0	-75.0	4.59	176.00	22.42	46.77	-	-	-	45.67	36.36	-	-	-	-
13SEP00:14:45	38.15	763.0	791.0	814.0	854.0	866.0	-91.0	5.09	176.00	20.68	47.02	-	-	-	46.15	36.86	-	-	-	-
13SEP00:15:00	38.44	731.0	763.0	791.0	837.0	880.0	-106.0	3.66	185.90	19.22	47.08	-	-	-	45.70	37.76	-	-	-	-
13SEP00:15:15	38.67	695.5	731.0	763.0	814.0	866.0	-118.5	3.51	201.39	17.92	46.89	-	-	-	44.46	37.73	-	-	-	-
13SEP00:15:30	38.69	654.9	695.5	731.0	791.0	854.0	-136.1	4.69	190.00	17.46	46.93	-	-	-	43.72	37.69	-	-	-	-
13SEP00:15:45	38.62	614.7	654.9	695.5	763.0	837.0	-148.3	3.63	215.70	16.69	46.26	-	-	-	42.96	37.97	-	-	-	-
13SEP00:16:00	38.91	567.3	614.7	654.9	731.0	814.0	-163.7	4.53	206.29	16.58	45.98	-	-	-	42.43	38.21	-	-	-	-
13SEP00:16:15	38.67	521.0	567.3	614.7	695.5	791.0	-174.5	4.03	198.00	16.46	46.06	-	-	-	42.14	38.53	-	-	-	-
13SEP00:16:30	38.49	470.4	521.0	567.3	654.9	763.0	-184.5	3.86	193.10	16.70	44.86	-	-	-	40.55	37.74	-	-	-	-
13SEP00:16:45	38.63	416.3	470.4	521.0	614.7	731.0	-198.4	3.79	201.60	16.48	44.45	-	-	-	40.40	38.53	-	-	-	-
13SEP00:17:00	38.50	364.1	416.3	470.4	567.3	695.5	-203.2	3.66	205.70	16.21	44.24	-	-	-	40.27	38.74	-	-	-	-
13SEP00:17:15	38.30	310.7	364.1	416.3	521.0	654.9	-210.3	4.34	186.10	17.23	43.25	-	-	-	39.06	38.39	-	-	-	-
13SEP00:17:30	37.91	226.9	310.7	364.1	470.4	614.7	-243.5	4.08	194.20	17.52	43.15	-	-	-	38.99	38.71	-	-	-	-
13SEP00:17:45	37.85	151.4	226.9	310.7	416.3	567.3	-264.9	4.53	184.70	18.07	42.36	-	-	-	38.17	38.47	-	-	-	-
13SEP00:18:00	37.68	145.6	151.4	226.9	364.1	521.0	-218.5	4.58	188.20	18.25	41.82	-	-	-	37.45	38.50	-	-	-	-
13SEP00:18:15	37.31	105.0	145.6	151.4	310.7	470.4	-205.7	4.48	185.30	18.84	40.72	-	-	-	36.46	38.18	-	-	-	-
13SEP00:18:30	37.37	50.6	105.0	145.6	226.9	416.3	-176.3	4.28	183.00	19.16	39.92	-	-	-	35.74	37.99	-	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA									
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND GRASS (Deg. C)	BACK- GROUND ROAD (Deg. C)	BACK- GROUND SOIL (Deg. C)	BACK- GROUND TREE (Deg. C)	BACK- GROUND WATER (Deg. C)	BACK- GROUND WATER (Deg. C)
13SEP00:18:45	YPG	36.85	16.6	50.6	105.0	151.4	364.1	-134.8	4.17	107.30	18.95	38.95	-	-	-	34.83	37.72	-	-
13SEP00:19:00	YPG	36.55	3.7	16.6	50.6	145.6	310.7	-141.9	3.91	175.28	19.57	38.16	-	-	-	34.24	37.64	-	-
13SEP00:19:15	YPG	36.26	3.2	3.7	16.6	105.0	226.9	-101.8	3.91	166.80	18.97	37.52	-	-	-	33.72	37.58	-	-
13SEP00:19:30	YPG	35.75	1.2	3.2	3.7	50.6	151.4	-49.4	4.43	177.10	21.03	37.02	-	-	-	33.47	37.46	-	-
13SEP00:19:45	YPG	35.69	1.2	1.2	3.2	16.6	145.6	-15.4	5.26	183.50	25.33	36.47	-	-	-	33.45	37.25	-	-
13SEP00:20:00	YPG	35.15	1.9	1.2	1.2	3.7	105.0	-1.8	4.94	184.20	26.78	35.86	-	-	-	33.03	36.94	-	-
13SEP00:20:15	YPG	34.69	1.0	1.9	1.2	3.2	50.6	-2.2	4.98	178.90	26.86	35.33	-	-	-	32.64	36.63	-	-
13SEP00:20:30	YPG	34.37	1.9	1.0	1.9	1.2	16.6	-0.2	4.33	182.40	27.14	34.86	-	-	-	32.35	36.35	-	-
13SEP00:20:45	YPG	33.93	1.2	1.0	1.0	1.2	3.7	-0.8	4.32	178.10	28.33	34.33	-	-	-	32.03	36.02	-	-
13SEP00:21:00	YPG	33.48	1.0	1.2	1.0	1.9	3.2	-0.9	4.70	187.20	30.61	33.89	-	-	-	31.70	35.68	-	-
13SEP00:21:15	YPG	33.17	1.1	1.0	1.2	1.8	1.2	0.1	4.71	187.58	31.71	33.42	-	-	-	31.38	35.35	-	-
13SEP00:21:30	YPG	32.58	1.1	1.1	1.0	1.0	1.2	0.1	5.23	188.10	33.02	33.08	-	-	-	31.08	35.02	-	-
13SEP00:21:45	YPG	32.36	1.1	1.1	1.1	1.2	1.9	-0.0	5.49	184.00	33.95	32.69	-	-	-	30.89	34.71	-	-
13SEP00:22:00	YPG	31.72	1.0	1.1	1.1	1.0	1.0	0.0	5.34	183.66	34.43	32.10	-	-	-	30.48	34.35	-	-
13SEP00:22:15	YPG	31.77	1.0	1.0	1.1	1.1	1.0	-0.1	4.62	178.20	34.66	31.77	-	-	-	30.10	34.00	-	-
13SEP00:22:30	YPG	31.47	0.9	1.0	1.0	1.1	1.2	-0.2	3.74	180.53	35.32	31.30	-	-	-	29.68	33.65	-	-
13SEP00:22:45	YPG	31.09	0.9	0.9	1.0	1.1	1.0	-0.2	1.60	158.20	36.87	30.94	-	-	-	29.16	33.34	-	-
13SEP00:23:00	YPG	30.75	1.2	0.9	1.0	1.1	1.1	0.2	2.58	145.90	36.77	30.59	-	-	-	28.78	33.11	-	-
13SEP00:23:15	YPG	30.50	1.3	1.2	0.9	1.0	1.1	0.2	3.91	135.70	39.82	30.33	-	-	-	28.96	32.75	-	-
13SEP00:23:30	YPG	30.22	1.1	1.3	1.2	0.9	1.1	0.2	4.76	143.20	41.02	30.13	-	-	-	28.84	32.50	-	-
13SEP00:23:45	YPG	30.19	1.0	1.1	1.3	0.9	1.0	0.1	1.39	100.00	0.87	1.35	2.09	-	-	0.45	-	-	-
14AUG01:00:15	APH	0.89	1.4	1.4	1.2	1.6	1.4	-0.0	1.48	8.56	100.00	0.82	1.29	2.02	-	0.47	-	-	-
14AUG01:00:30	APH	0.84	1.3	1.4	1.4	1.3	1.4	-0.0	2.20	25.24	100.00	0.85	1.34	2.00	-	0.43	-	-	-
14AUG01:01:00	APH	0.81	1.2	1.3	1.3	1.4	1.6	-0.2	1.81	19.77	100.00	0.86	1.33	2.00	-	0.40	-	-	-
14AUG01:01:15	APH	0.82	1.2	1.2	1.3	1.4	1.3	-0.2	2.14	16.62	100.00	0.84	1.31	1.96	-	0.43	-	-	-
14AUG01:01:30	APH	0.81	1.1	1.2	1.2	1.3	1.4	-0.2	1.82	5.40	100.00	0.86	1.27	1.96	-	0.41	-	-	-
14AUG01:01:45	APH	0.82	1.1	1.1	1.2	1.3	1.4	-0.2	2.20	2.90	100.00	0.91	1.39	2.02	-	0.44	-	-	-
14AUG01:02:00	APH	0.84	1.2	1.1	1.1	1.2	1.4	0.0	2.15	5.84	100.00	0.91	1.36	2.00	-	0.48	-	-	-
14AUG01:02:15	APH	0.86	1.1	1.2	1.1	1.2	1.3	-0.1	2.06	6.45	100.00	0.93	1.34	1.99	-	0.58	-	-	-
14AUG01:02:30	APH	0.88	0.9	1.1	1.2	1.1	1.3	-0.2	1.70	14.22	100.00	0.96	1.45	2.00	-	0.55	-	-	-
14AUG01:02:45	APH	0.90	0.9	0.9	1.1	1.1	1.2	-0.2	1.82	10.45	100.00	0.97	1.46	2.03	-	0.61	-	-	-
14AUG01:03:00	APH	0.92	0.8	0.9	0.9	1.2	1.2	-0.3	2.89	30.92	100.00	1.03	1.47	2.00	-	0.61	-	-	-
14AUG01:03:15	APH	0.92	1.0	0.8	0.9	1.1	1.1	-0.1	2.40	36.94	100.00	0.97	1.40	1.95	-	0.64	-	-	-

DAY AND TIME OF VISIT COLLECTION SITE	AIR TEMPERATURE (Deg. C)	METEOROLOGICAL DATA										RADIOMETRIC DATA									
		SOLAR RADIATION					SOLAR RADIATION					RELATIVE HUMIDITY									
		15-MINS. BEFORE	BEFORE	30-MINS. BEFORE	60-MINS. BEFORE	120-MINS. BEFORE	15-MINS. BEFORE	BEFORE	30-MINS. BEFORE	60-MINS. BEFORE	120-MINS. BEFORE	GROUND BUSH	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)
14MAR91:03:30	APR	0.93	0.9	1.0	0.8	0.9	1.1	1.1	0.0	1.06	10.79	100.00	1.00	1.65	2.00	-	-	-	-	-	-
14MAR91:05:45	APR	1.01	0.9	0.9	1.0	0.9	1.2	1.2	0.0	1.60	3.38	100.00	1.11	1.55	2.05	-	-	-	-	-	-
14MAR91:06:00	APR	1.07	1.0	0.9	0.9	0.8	1.1	1.1	0.1	1.06	2.04	100.00	1.22	1.61	2.09	-	-	-	-	-	-
14MAR91:06:15	APR	1.12	0.9	1.0	0.9	1.0	0.9	0.9	-0.1	2.01	14.18	100.00	1.20	1.56	2.03	-	-	-	-	-	-
14MAR91:06:30	APR	1.17	0.8	0.9	1.0	0.9	0.9	0.9	-0.1	1.96	25.05	100.00	1.26	1.68	2.09	-	-	-	-	-	-
14MAR91:06:45	APR	1.23	1.0	0.8	0.9	0.9	0.8	0.8	0.1	0.93	349.00	100.00	1.34	1.77	2.20	-	-	-	-	-	-
14MAR91:06:00	APR	1.35	1.0	1.0	0.8	1.0	1.0	1.0	0.0	1.77	337.40	100.00	1.42	1.89	2.25	-	-	-	-	-	-
14MAR91:06:15	APR	1.38	1.2	1.0	1.0	0.9	0.9	0.9	0.3	1.73	350.50	100.00	1.53	1.82	2.21	-	-	-	-	-	-
14MAR91:06:30	APR	1.37	1.1	1.2	1.0	0.8	0.9	0.8	0.3	1.56	352.30	100.00	1.38	1.76	2.17	-	-	-	-	-	-
14MAR91:06:45	APR	1.36	1.3	1.1	1.2	1.0	1.0	1.0	0.3	2.13	1.09	100.00	1.36	1.75	2.17	-	-	-	-	-	-
14MAR91:07:00	APR	1.39	1.2	1.3	1.1	1.0	0.9	0.9	0.2	0.96	0.28	100.00	1.20	1.64	2.10	-	-	-	-	-	-
14MAR91:07:15	APR	1.40	1.1	1.2	1.3	1.2	1.3	1.2	-0.1	2.37	327.20	100.00	1.16	1.58	2.07	-	-	-	-	-	-
14MAR91:07:30	APR	1.29	1.4	1.1	1.2	1.1	1.0	1.0	0.3	2.26	347.20	100.00	1.12	1.56	2.06	-	-	-	-	-	-
14MAR91:07:45	APR	1.24	2.4	1.4	1.1	1.3	1.0	1.1	1.1	2.35	349.00	100.00	1.00	1.45	2.05	-	-	-	-	-	-
14MAR91:08:00	APR	1.21	3.8	2.4	1.4	1.2	1.2	1.2	2.6	2.31	354.00	100.00	1.04	1.36	1.99	-	-	-	-	-	-
14MAR91:08:15	APR	1.09	7.2	5.2	3.8	1.4	1.3	1.3	5.8	2.52	353.50	100.00	0.96	1.17	1.87	-	-	-	-	-	-
14MAR91:08:30	APR	1.06	12.4	8.7	7.2	3.8	1.1	1.1	8.6	2.60	342.90	100.00	0.90	-0.01	1.73	-	-	-	-	-	-
14MAR91:08:45	APR	1.07	14.0	12.4	8.7	5.2	1.4	1.4	8.8	2.63	341.30	100.00	0.53	0.63	1.80	-	-	-	-	-	-
14MAR91:09:00	APR	1.19	6.9	14.0	12.4	7.2	2.4	2.4	-0.3	2.21	337.40	100.00	1.14	1.13	1.94	-	-	-	-	-	-
14MAR91:09:15	APR	1.12	4.3	6.9	14.0	8.7	3.8	3.8	-4.4	2.45	338.40	100.00	1.34	1.37	2.02	-	-	-	-	-	-
14MAR91:09:30	APR	1.10	8.9	4.3	6.9	12.4	5.2	5.2	-3.5	2.59	351.90	100.00	1.37	1.37	2.06	-	-	-	-	-	-
14MAR91:09:45	APR	1.11	10.4	8.9	4.3	14.8	7.2	7.2	4.4	1.89	343.90	100.00	1.51	1.57	2.14	-	-	-	-	-	-
14MAR91:10:00	APR	1.19	31.3	10.4	8.9	6.9	8.7	8.7	24.3	1.29	341.40	100.00	1.65	1.80	2.24	-	-	-	-	-	-
14MAR91:10:15	APR	1.22	46.6	31.3	18.4	4.3	12.4	12.4	42.3	2.32	348.10	100.00	1.76	1.95	2.38	-	-	-	-	-	-
14MAR91:10:30	APR	1.20	53.0	46.6	31.3	8.9	14.8	14.8	44.1	2.02	333.00	100.00	1.78	2.02	2.46	-	-	-	-	-	-
14MAR91:10:45	APR	1.17	59.7	53.9	46.6	18.4	6.9	6.9	41.3	2.00	333.40	100.00	1.87	2.23	2.47	-	-	-	-	-	-
14MAR91:11:00	APR	1.20	101.1	59.7	53.0	31.3	4.3	4.3	69.8	2.20	342.20	100.00	1.78	2.16	2.62	-	-	-	-	-	-
14MAR91:11:15	APR	1.15	132.3	101.1	99.7	66.6	8.9	8.9	85.7	2.65	334.50	100.00	1.91	2.35	2.67	-	-	-	-	-	-
14MAR91:11:30	APR	1.20	254.0	132.3	101.1	53.0	18.4	18.4	181.0	2.52	345.80	100.00	2.47	3.26	3.02	-	-	-	-	-	-
14MAR91:11:45	APR	1.45	215.7	234.0	132.3	99.7	31.3	31.3	156.0	2.00	341.70	100.00	3.01	4.32	3.53	-	-	-	-	-	-
14MAR91:12:00	APR	1.56	152.2	215.7	234.0	101.1	66.6	66.6	51.1	2.69	341.60	100.00	2.35	3.60	3.32	-	-	-	-	-	-
14MAR91:12:15	APR	1.50	94.5	152.2	215.7	132.3	53.0	53.0	-37.0	2.55	349.60	99.90	1.90	2.90	3.10	-	-	-	-	-	-

DAY AND TIME OF VISITED COLLECTION SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)
14MAR91:12:00	1.67	91.8	94.5	152.2	234.0	59.7	-142.2	2.72	340.30	99.90	1.95	2.95	3.20	1.27	-	-	-	-	-	-
14MAR91:12:15	1.59	124.5	91.8	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5
14MAR91:12:30	1.74	133.8	124.5	91.8	152.2	132.3	-91.2	2.81	342.18	99.80	2.40	3.59	3.43	1.58	-	-	-	-	-	-
14MAR91:12:45	1.80	145.7	133.8	124.5	144.5	234.0	51.2	3.50	349.00	99.50	2.65	3.93	3.68	1.81	-	-	-	-	-	-
14MAR91:13:00	1.96	95.2	145.7	133.8	91.8	215.7	3.4	2.99	341.00	99.30	2.27	3.29	3.48	1.61	-	-	-	-	-	-
14MAR91:13:15	1.91	75.5	95.2	145.7	124.5	152.2	-69.0	2.68	340.70	99.10	2.24	3.18	3.37	1.60	-	-	-	-	-	-
14MAR91:13:30	1.91	85.3	75.5	95.2	133.8	94.5	-68.5	3.05	343.50	98.90	2.35	3.29	3.41	1.73	-	-	-	-	-	-
14MAR91:13:45	1.90	94.3	85.3	75.5	145.7	91.8	-51.4	2.89	339.90	98.70	2.40	3.34	3.41	1.79	-	-	-	-	-	-
14MAR91:14:00	1.99	83.5	94.3	85.3	95.2	124.5	-11.7	3.10	339.90	98.50	2.42	3.40	3.52	1.80	-	-	-	-	-	-
14MAR91:14:15	2.02	81.5	83.5	94.3	75.5	133.8	6.0	2.97	343.59	98.30	2.38	3.31	3.46	1.82	-	-	-	-	-	-
14MAR91:14:30	2.06	81.8	81.5	83.5	85.3	145.7	-3.5	3.22	337.00	98.30	2.52	3.39	3.43	1.87	-	-	-	-	-	-
14MAR91:14:45	2.03	68.0	81.8	81.5	94.3	95.2	-26.3	3.42	345.00	98.20	2.34	3.13	3.30	1.84	-	-	-	-	-	-
14MAR91:15:00	1.97	45.5	68.0	81.8	83.5	75.5	-38.0	3.03	335.20	98.20	2.00	2.72	3.12	1.67	-	-	-	-	-	-
14MAR91:15:15	1.90	55.0	45.5	68.0	81.5	85.3	-26.5	3.31	341.90	98.30	2.03	2.82	3.14	1.74	-	-	-	-	-	-
14MAR91:15:30	1.96	59.0	55.0	45.5	81.8	94.3	-22.8	2.79	344.30	98.40	2.25	3.09	3.26	1.83	-	-	-	-	-	-
14MAR91:15:45	2.00	51.8	59.0	55.0	68.0	83.5	-16.1	2.92	331.70	98.40	2.15	2.90	3.23	1.85	-	-	-	-	-	-
14MAR91:16:00	1.98	56.6	51.8	59.0	45.5	81.5	11.2	3.41	330.50	98.30	2.12	2.85	3.14	1.85	-	-	-	-	-	-
14MAR91:16:15	1.98	60.7	56.6	51.8	55.0	81.8	5.8	3.43	330.70	98.20	2.09	2.86	3.11	1.80	-	-	-	-	-	-
14MAR91:16:30	1.89	64.1	60.7	56.6	59.0	68.0	-14.9	3.39	332.90	98.20	1.83	2.59	2.96	1.55	-	-	-	-	-	-
14MAR91:16:45	1.78	42.2	44.1	69.7	51.8	45.5	-9.4	3.05	335.20	98.40	1.86	2.60	2.94	1.58	-	-	-	-	-	-
14MAR91:17:00	1.75	39.4	42.2	44.1	56.6	55.0	-1.2	3.22	343.70	98.50	1.84	2.60	2.89	1.56	-	-	-	-	-	-
14MAR91:17:15	1.70	32.8	39.4	42.2	60.7	59.0	-27.9	3.41	346.00	98.50	1.69	2.36	2.82	1.47	-	-	-	-	-	-
14MAR91:17:30	1.66	18.1	32.8	39.4	44.1	51.8	-26.0	3.40	341.70	98.50	1.48	2.00	2.64	1.43	-	-	-	-	-	-
14MAR91:17:45	1.64	10.7	16.1	32.8	42.2	54.6	-31.6	3.25	340.60	98.50	1.43	1.91	2.56	1.42	-	-	-	-	-	-
14MAR91:18:00	1.63	6.3	10.7	16.1	39.4	60.7	-33.2	3.00	337.20	98.40	1.37	1.84	2.50	1.41	-	-	-	-	-	-
14MAR91:18:15	1.64	2.7	6.3	10.7	32.8	44.1	-30.1	3.23	339.00	98.40	1.34	1.77	2.40	1.41	-	-	-	-	-	-
14MAR91:18:30	1.62	0.5	2.7	6.3	18.1	42.2	-17.6	3.31	339.00	98.50	1.33	1.67	2.31	1.46	-	-	-	-	-	-
14MAR91:18:45	1.62	0.3	0.5	2.7	10.7	39.4	-10.3	3.20	330.90	98.40	1.57	1.58	2.28	1.40	-	-	-	-	-	-
14MAR91:19:00	1.62	0.1	0.3	0.5	0.3	32.8	-6.2	2.14	343.70	98.50	1.67	1.63	2.23	1.44	-	-	-	-	-	-
14MAR91:19:15	1.63	0.1	0.1	0.3	2.7	18.1	-2.6	2.40	344.40	98.60	1.72	1.71	2.33	1.47	-	-	-	-	-	-
14MAR91:19:30	1.67	0.0	0.1	0.1	0.5	10.7	-0.4	2.77	333.60	98.60	1.76	1.76	2.37	1.51	-	-	-	-	-	-
14MAR91:19:45	1.71	0.0	0.0	0.1	0.1	6.3	-0.3	2.20	349.90	98.59	1.79	1.78	2.38	1.55	-	-	-	-	-	-
14MAR91:20:00	1.75	0.0	0.0	0.0	0.1	2.7	-0.1	1.96	344.40	98.50	1.81	1.80	2.39	1.64	-	-	-	-	-	-
14MAR91:20:15	1.80	0.2	0.0	0.0	0.1	0.5	0.1	2.31	343.10	98.40	1.85	1.86	2.40	1.62	-	-	-	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA									
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION			SOLAR RADIATION			SOLAR RADIATION DIFFERENCE 125°-115°S. (M/2)	UTD MAGNITUDE (M/2)	UTD DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK-							
		SOLAR RADIATION BEFORE (M/2)	SOLAR RADIATION AFTER (M/2)	SOLAR RADIATION DIFFERENCE (M/2)	GROUND DIRT (Deg. C)	GRASS (Deg. C)	SOIL (Deg. C)					BACK-GROUND (Deg. C)	BACK-GRASS (Deg. C)	BACK-SOIL (Deg. C)	BACK-TREE WATER (Deg. C)				
14MAR91:20:30 AM	1.86	0.2	0.2	0.8	5.0	0.3	0.1	2.48	340.30	98.50	1.87	1.86	2.40	-	1.60				
14MAR91:20:45 AM	1.86	0.0	0.2	0.2	0.0	0.1	-0.0	2.04	346.10	98.50	1.87	1.87	2.43	-	1.68				
14MAR91:21:00 AM	1.85	0.1	0.0	0.2	0.0	0.1	-0.1	2.14	335.90	98.50	1.87	1.89	2.41	-	1.68				
14MAR91:21:15 AM	1.85	0.0	0.1	0.0	0.2	0.0	-0.2	2.54	340.90	98.40	1.91	1.95	2.43	-	1.70				
14MAR91:21:30 AM	1.83	0.2	0.0	0.1	3.2	0.0	0.0	2.13	344.80	98.50	1.88	1.91	2.40	-	1.67				
14MAR91:21:45 AM	1.82	0.1	0.2	0.0	0.0	0.0	0.1	2.69	342.30	98.40	1.89	1.90	2.43	-	1.64				
14MAR91:22:00 AM	1.79	0.2	0.1	0.2	0.1	0.2	0.0	3.12	342.30	98.70	1.90	1.94	2.44	-	1.60				
14MAR91:22:15 AM	1.76	0.3	0.2	0.1	0.0	0.2	0.3	2.76	344.80	98.80	1.89	1.96	2.46	-	1.59				
14MAR91:22:30 AM	1.76	0.2	0.3	0.2	0.2	0.0	0.0	2.75	341.40	99.00	1.91	1.94	2.44	-	1.67				
14MAR91:22:45 AM	1.80	0.2	0.3	0.1	0.1	0.1	0.1	2.49	339.10	99.10	1.91	1.92	2.41	-	1.63				
14MAR91:23:00 AM	1.87	0.2	0.2	0.2	0.2	0.0	0.0	2.53	339.00	99.20	1.94	2.00	2.41	-	1.67				
14MAR91:23:15 AM	1.92	0.2	0.2	0.2	0.3	0.2	-0.1	2.67	335.30	99.20	2.00	2.05	2.45	-	1.74				
14MAR91:23:30 AM	1.97	0.2	0.2	0.2	0.2	0.1	0.0	2.66	334.20	99.10	2.03	2.10	2.47	-	1.79				
14MAR91:23:45 AM	2.02	0.2	0.2	0.2	0.2	0.2	-0.0	2.73	332.50	99.00	2.06	2.16	2.46	-	1.80				
15MAR91:00:00 AM	2.06	0.3	0.2	0.2	0.2	0.3	0.0	2.47	339.20	98.90	2.08	2.16	2.47	-	1.86				
15MAR91:00:15 AM	2.09	0.1	0.3	0.2	0.2	0.2	-0.0	2.17	337.20	98.90	2.10	2.19	2.48	-	1.83				
15MAR91:00:30 AM	2.07	0.1	0.1	0.3	0.2	0.2	-0.1	1.31	339.30	98.90	2.12	2.21	2.50	-	1.86				
15MAR91:00:45 AM	2.03	0.2	0.1	0.1	0.2	0.2	0.0	1.15	335.20	99.00	2.09	2.17	2.45	-	1.83				
15MAR91:01:00 AM	2.04	0.2	0.2	0.1	0.3	0.2	-0.1	2.70	334.80	99.10	2.04	2.08	2.50	-	2.75				
15MAR91:01:15 AM	2.07	0.1	0.2	0.2	0.1	0.2	-0.0	3.02	335.20	99.10	2.23	2.15	-	-	2.02				
15MAR91:01:30 AM	2.09	0.1	0.1	0.2	0.1	0.2	-0.0	3.03	335.80	99.10	2.22	2.16	-	-	2.02				
15MAR91:01:45 AM	2.10	0.2	0.1	0.1	0.2	0.3	0.0	3.20	335.40	98.90	2.21	2.15	-	-	2.03				
15MAR91:02:00 AM	2.10	0.3	0.2	0.1	0.2	0.1	0.1	2.83	331.60	98.80	2.19	2.11	-	-	2.03				
15MAR91:02:15 AM	2.12	0.2	0.3	0.2	0.1	0.1	0.1	3.14	331.60	98.70	2.19	2.11	-	-	2.06				
15MAR91:02:30 AM	2.13	0.6	0.2	0.3	0.1	0.2	-0.1	2.98	337.60	98.50	2.18	2.09	-	-	2.02				
15MAR91:02:45 AM	2.12	0.2	0.0	0.2	0.2	0.2	-0.0	2.97	345.00	98.30	2.10	1.94	-	-	2.02				
15MAR91:03:00 AM	2.10	0.3	0.2	0.0	0.3	0.1	0.0	2.82	337.60	98.20	1.89	1.62	-	-	1.86				
15MAR91:03:15 AM	2.02	0.3	0.3	0.2	0.2	0.1	0.0	2.43	343.80	98.10	1.54	1.04	-	-	1.61				
15MAR91:03:30 AM	1.97	0.1	0.3	0.3	0.0	0.2	0.0	3.18	338.10	98.60	1.85	1.38	-	-	1.75				
15MAR91:03:45 AM	1.99	0.1	0.1	0.3	0.2	0.3	-0.0	3.00	335.40	98.00	1.86	1.43	-	-	1.76				
15MAR91:04:00 AM	1.98	0.1	0.1	0.1	0.3	0.2	-0.1	3.06	338.90	97.90	1.90	1.40	-	-	1.87				
15MAR91:04:15 AM	2.00	0.1	0.1	0.1	0.3	0.0	-0.1	3.09	341.40	97.80	1.86	1.41	-	-	1.82				
15MAR91:04:30 AM	1.93	0.1	0.1	0.1	0.1	0.2	0.0	3.04	337.00	97.70	1.45	0.87	-	-	1.58				
15MAR91:04:45 AM	1.83	0.0	0.1	0.1	0.1	0.3	-0.1	2.95	343.20	97.60	1.26	0.51	-	-	1.41				

METEOROLOGICAL DATA										RADIOMETRIC DATA									
DAY AND TIME OF VISIT	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	TIME DIFFERENCE (MIN)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)
15MAR91:05:00	1.83	0.1	0.0	0.1	0.1	0.1	0.1	0.1	-0.0	2.50	347.70	97.50	1.79	1.31	-	-	1.76	-	-
15MAR91:05:15	1.92	0.8	0.1	0.0	0.1	0.1	0.1	0.1	0.7	2.76	339.80	97.40	2.05	1.35	-	-	1.87	-	-
15MAR91:05:30	1.99	0.1	0.8	0.1	0.1	0.1	0.1	0.1	0.8	2.81	337.90	97.10	1.92	1.47	-	-	1.86	-	-
15MAR91:05:45	1.96	0.1	0.1	0.8	0.6	0.1	0.1	0.1	0.1	2.87	330.50	96.70	1.69	1.22	-	-	1.72	-	-
15MAR91:06:00	1.89	0.0	0.1	0.1	0.1	0.1	0.1	0.1	-0.0	2.39	336.80	96.70	1.72	1.25	-	-	1.65	-	-
15MAR91:06:15	1.86	0.6	0.0	0.1	0.8	0.1	0.1	0.1	-0.1	2.54	332.70	96.70	1.69	1.24	-	-	1.62	-	-
15MAR91:06:30	1.81	3.3	0.6	0.0	0.1	0.0	0.1	0.0	3.1	2.49	329.70	96.80	1.61	1.15	-	-	1.58	-	-
15MAR91:06:45	1.78	11.7	3.3	0.6	0.1	0.1	0.1	0.1	11.6	2.34	326.20	96.90	1.69	1.69	-	-	1.81	-	-
15MAR91:07:00	1.92	18.9	11.7	3.3	0.6	0.8	0.8	0.8	18.9	2.98	320.60	97.00	2.02	1.90	-	-	1.93	-	-
15MAR91:07:15	2.16	36.7	18.9	11.7	0.6	0.1	0.1	0.1	36.1	3.10	331.00	96.70	2.26	2.34	-	-	2.08	-	-
15MAR91:07:30	2.34	47.5	36.7	18.9	3.3	0.1	0.1	0.1	44.2	3.14	330.80	96.10	2.46	2.54	-	-	2.34	-	-
15MAR91:07:45	2.55	77.5	47.5	36.7	11.7	0.9	0.9	0.9	65.8	3.17	329.80	95.60	2.82	3.30	-	-	2.58	-	-
15MAR91:08:00	2.84	85.4	77.5	47.5	18.9	0.6	0.6	0.6	66.5	3.59	331.20	96.90	2.97	3.42	-	-	2.94	-	-
15MAR91:08:15	3.07	103.2	85.4	77.5	36.7	3.3	3.3	3.3	66.5	3.77	335.90	93.50	3.25	3.85	-	-	3.18	-	-
15MAR91:08:30	3.36	151.4	103.2	85.4	47.5	11.7	11.7	11.7	103.9	4.75	326.10	91.80	3.46	4.50	-	-	3.45	-	-
15MAR91:08:45	3.65	199.3	151.4	103.2	77.5	18.9	18.9	18.9	121.8	4.88	328.10	90.00	4.21	5.27	-	-	3.78	-	-
15MAR91:09:00	4.02	276.7	199.3	151.4	85.4	36.7	36.7	36.7	191.3	5.14	331.40	88.10	5.22	6.48	-	-	4.17	-	-
15MAR91:09:15	4.50	435.9	276.7	199.3	103.2	47.5	47.5	47.5	332.7	5.14	329.10	86.30	6.91	8.68	-	-	4.99	-	-
15MAR91:09:30	5.23	665.2	435.9	276.7	151.4	77.5	77.5	77.5	542.8	4.59	328.10	82.70	9.43	11.40	-	-	5.77	-	-
15MAR91:09:45	5.70	666.5	694.2	435.9	276.7	103.2	103.2	103.2	447.2	5.14	326.80	78.50	7.44	9.35	-	-	4.73	-	-
15MAR91:10:00	6.11	422.6	666.5	694.2	276.7	103.2	103.2	103.2	143.9	4.14	347.50	75.20	6.11	7.04	-	-	4.44	-	-
15MAR91:10:15	6.20	686.4	422.6	666.5	435.9	151.4	151.4	151.4	63.7	5.25	335.50	71.70	6.61	8.06	-	-	5.12	-	-
15MAR91:10:30	6.20	686.4	422.6	666.5	435.9	151.4	151.4	151.4	-9.8	4.61	347.70	60.82	11.26	13.95	-	-	6.36	-	-
15MAR91:10:45	6.61	438.1	686.4	422.6	666.5	276.7	276.7	276.7	-228.4	4.53	348.60	66.15	7.25	8.34	-	-	5.39	-	-
15MAR91:11:00	6.19	255.3	438.1	686.4	422.6	635.9	635.9	635.9	-157.3	4.65	342.20	65.46	8.76	10.34	-	-	5.36	-	-
15MAR91:11:15	6.42	506.1	255.3	438.1	699.6	699.6	699.6	699.6	6.5	3.95	349.90	64.96	8.76	10.34	-	-	6.47	-	-
15MAR91:11:30	6.67	348.6	506.1	255.3	686.4	686.4	686.4	686.4	-335.8	5.10	336.80	63.72	8.51	9.91	-	-	6.57	-	-
15MAR91:11:45	6.53	359.1	348.6	506.1	506.1	422.6	422.6	422.6	-79.8	3.82	354.60	64.82	8.40	9.65	-	-	6.57	-	-
15MAR91:12:00	6.79	389.9	359.1	348.6	255.3	499.6	499.6	499.6	154.6	4.48	353.90	63.13	7.75	8.74	-	-	6.30	-	-
15MAR91:12:15	7.81	536.8	389.9	359.1	506.1	686.4	686.4	686.4	30.7	3.40	348.30	62.76	10.52	13.02	-	-	7.65	-	-
15MAR91:12:30	7.08	328.6	536.8	389.9	348.6	438.1	438.1	438.1	-20.8	4.35	342.20	61.31	7.74	8.47	-	-	5.99	-	-
15MAR91:12:45	6.81	264.6	328.6	536.8	359.1	255.3	255.3	255.3	-94.5	4.31	342.20	61.19	7.95	9.04	-	-	6.36	-	-
15MAR91:13:00	7.22	332.3	264.6	328.6	389.9	506.1	506.1	506.1	-57.6	3.96	343.60	61.85	8.43	9.46	-	-	7.16	-	-
15MAR91:13:15	6.93	156.3	332.3	264.6	536.8	348.6	348.6	348.6	-380.5	3.87	336.90	60.66	7.48	7.97	-	-	6.32	-	-

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	METEOROLOGICAL DATA				RADIOMETRIC DATA											
		SOLAR RADIATION		SOLAR RADIATION		RELATIVE HUMIDITY (PERCENT)	WIND DIRECTION (DEGREES)	WIND SPEED (MPH)	WIND SPEED (MPH)	BACK-SCATTER				BACK-SCATTER			
		15-MIN. BEFORE	15-MIN. AFTER	15-MIN. BEFORE	15-MIN. AFTER					GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
		(WAT 2)	(WAT 2)	(WAT 2)	(WAT 2)					(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)
1500091:13:30	7.54	615.4	54.3	332.3	338.6	359.1	286.8	3.75	340.20	68.89	13.29	16.42	9.65	-	-	9.50	-
1500091:13:45	7.96	407.9	615.4	156.3	264.6	389.9	143.3	4.39	341.40	58.39	9.81	10.28	7.38	-	-	7.35	-
1500091:14:00	7.68	229.7	407.9	615.4	332.3	536.8	102.6	4.95	338.40	57.68	8.73	9.39	6.45	-	-	7.15	-
1500091:14:15	7.90	337.1	229.7	407.9	156.3	338.6	108.8	3.92	347.80	56.46	8.39	9.12	6.53	-	-	7.28	-
1500091:14:30	8.22	354.8	337.1	229.7	615.4	264.6	268.6	4.36	336.10	56.11	9.88	11.39	6.99	-	-	8.30	-
1500091:14:45	8.78	606.9	354.8	337.1	407.9	332.3	277.8	4.88	337.40	56.46	13.67	16.47	7.18	-	-	9.75	-
1500091:15:00	8.74	265.8	606.9	354.8	229.7	156.3	35.3	4.47	333.50	52.83	7.82	8.29	6.41	-	-	7.12	-
1500091:15:15	8.61	297.8	265.8	606.9	337.1	615.4	39.3	4.89	340.40	52.83	8.76	9.26	6.86	-	-	7.60	-
1500091:15:30	8.58	254.7	297.8	265.8	354.8	407.9	108.1	4.32	342.40	52.89	9.67	10.37	6.94	-	-	8.16	-
1500091:15:45	8.28	205.8	254.7	297.8	406.9	229.7	479.9	4.78	334.20	52.81	8.34	8.66	5.84	-	-	7.57	-
1500091:16:00	8.21	212.3	205.8	254.7	265.8	337.1	52.7	5.44	335.30	51.95	7.94	8.16	5.85	-	-	7.56	-
1500091:16:15	8.09	275.2	212.3	205.8	297.8	354.8	22.6	5.31	331.30	51.71	9.43	9.77	6.13	-	-	8.41	-
1500091:16:30	8.16	181.4	275.2	212.3	254.7	406.9	73.3	5.44	335.30	51.38	7.29	7.17	5.19	-	-	7.10	-
1500091:16:45	7.62	132.6	181.4	275.2	205.8	265.8	72.4	6.14	332.70	52.86	6.87	6.88	5.81	-	-	6.89	-
1500091:17:00	7.49	101.7	132.6	181.4	132.6	297.8	118.6	6.47	345.46	52.49	6.81	6.71	5.81	-	-	6.86	-
1500091:17:15	7.25	73.8	101.7	132.6	275.2	254.7	282.2	4.78	349.70	52.47	6.60	6.49	4.94	-	-	6.80	-
1500091:17:30	7.13	49.5	73.8	101.7	181.4	205.8	131.9	4.49	339.20	53.87	6.38	6.87	4.75	-	-	6.59	-
1500091:17:45	6.97	23.6	49.5	73.8	132.6	212.3	108.9	4.91	340.40	53.35	5.91	5.68	4.53	-	-	6.42	-
1500091:18:00	6.80	9.8	23.6	49.5	101.7	275.2	91.9	4.13	331.70	54.89	5.43	5.48	4.36	-	-	6.32	-
1500091:18:15	6.67	5.0	9.8	23.6	73.8	181.4	68.8	5.07	340.80	54.65	5.45	5.18	4.16	-	-	6.27	-
1500091:18:30	6.61	1.2	5.0	9.8	49.5	132.6	48.3	3.88	338.40	54.58	5.15	5.09	4.04	-	-	6.18	-
1500091:18:45	6.42	6.5	1.2	5.0	23.6	101.7	23.2	4.38	328.30	55.13	3.98	3.67	2.36	-	-	5.54	-
1500091:19:00	6.13	1.0	6.5	1.2	9.8	73.8	8.8	3.75	337.80	55.84	4.31	3.86	2.99	-	-	5.57	-
1500091:19:15	6.10	1.2	1.0	6.5	5.0	49.5	3.9	4.02	334.80	56.19	4.68	4.18	3.17	-	-	5.65	-
1500091:19:30	6.82	1.2	1.2	1.2	1.8	23.6	8.8	3.88	331.30	56.83	4.86	4.58	3.58	-	-	5.79	-
1500091:19:45	5.95	1.2	1.2	1.2	0.5	9.8	8.7	2.98	329.80	57.34	4.44	3.98	3.35	-	-	5.49	-
1500091:20:00	5.63	1.2	1.2	1.2	1.8	5.0	8.2	3.82	327.70	59.34	4.22	3.62	2.92	-	-	5.36	-
1500091:20:15	5.41	1.2	1.2	1.2	1.2	1.2	8.8	3.87	324.50	60.89	4.21	3.59	2.79	-	-	5.33	-
1500091:20:30	5.38	1.2	1.2	1.2	1.2	0.5	8.8	3.24	322.80	61.16	4.28	3.78	2.87	-	-	5.24	-
1500091:20:45	5.39	1.1	1.2	1.2	1.2	1.8	8.1	3.64	326.20	60.78	3.47	2.81	2.11	-	-	4.96	-
1500091:21:00	4.94	1.1	1.1	1.2	1.2	1.2	8.1	2.81	321.80	62.28	3.39	2.83	2.18	-	-	4.78	-
1500091:21:15	4.61	1.1	1.1	1.1	1.1	1.2	8.1	2.58	323.10	64.35	2.39	1.86	1.31	-	-	4.23	-
1500091:21:30	4.11	1.2	1.1	1.1	1.2	1.2	8.8	2.86	324.10	65.18	1.23	0.73	0.39	-	-	3.63	-
1500091:21:45	3.34	1.1	1.2	1.1	1.1	1.2	8.8	2.91	323.80	66.99	1.12	0.19	0.15	-	-	3.35	-

DAY AND TIME OF VISIT COLLECTION SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
	SOLAR RADIATION					WIND					BACK-SCATTER					BACK-SCATTER				
	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION (W/M ²)	SOLAR RADIATION (W/M ²)	SOLAR RADIATION (W/M ²)	SOLAR RADIATION (W/M ²)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)	BACK- GROUND RADIATION (W/M ²)
15MAR91:22:00	2.69	1.0	1.1	1.2	1.1	2.63	321.28	69.35	2.63	321.28	8.35	-0.44	-0.43	-	2.70	-	-	-	-	-
15MAR91:22:15	2.22	1.2	1.0	1.1	1.1	2.39	323.50	71.80	2.39	323.50	-0.81	-1.05	-0.66	-	2.46	-	-	-	-	-
15MAR91:22:30	2.53	1.2	1.2	1.0	1.2	2.35	327.38	70.90	2.35	327.38	0.03	-1.14	-0.69	-	2.40	-	-	-	-	-
15MAR91:22:45	2.03	1.2	1.2	1.2	1.1	2.25	319.40	71.30	2.25	319.40	-0.06	-1.29	-0.94	-	2.12	-	-	-	-	-
15MAR91:23:00	1.58	1.2	1.2	1.2	1.0	2.22	308.40	72.90	2.22	308.40	-0.41	-1.88	-1.05	-	2.03	-	-	-	-	-
15MAR91:23:15	0.95	1.2	1.2	1.2	1.2	2.22	308.40	75.10	2.22	308.40	-0.67	-1.92	-1.19	-	1.96	-	-	-	-	-
15MAR91:23:30	0.81	1.3	1.2	1.2	1.1	2.09	321.70	76.40	2.09	321.70	-0.76	-2.07	-1.32	-	1.61	-	-	-	-	-
15MAR91:23:45	1.18	1.2	1.3	1.2	1.2	2.23	328.90	72.80	2.23	328.90	-1.36	-2.77	-1.89	-	1.53	-	-	-	-	-
15MAR91:00:00	2.09	1.2	1.2	1.2	1.2	1.93	341.60	70.60	1.93	341.60	-1.26	-2.70	-1.98	-	0.88	-	-	-	-	-
15MAR91:00:15	2.37	1.1	1.2	1.2	1.3	1.95	344.20	70.00	1.95	344.20	-1.42	-2.72	-1.98	-	0.73	-	-	-	-	-
15MAR91:00:30	2.20	1.1	1.1	1.2	1.2	1.71	358.00	70.20	1.71	358.00	-0.91	-2.33	-1.90	-	0.53	-	-	-	-	-
15MAR91:01:00	2.15	1.0	0.9	1.1	1.2	1.23	339.20	70.40	1.23	339.20	-1.18	-2.43	-1.89	-	0.59	-	-	-	-	-
15MAR91:01:15	1.86	1.0	1.0	0.9	1.1	0.56	337.00	71.00	0.56	337.00	-2.39	-3.61	-2.39	-	0.01	-	-	-	-	-
15MAR91:01:30	1.51	1.0	1.0	1.0	1.1	0.44	342.00	71.00	0.44	342.00	-3.47	-4.36	-2.71	-	0.42	-	-	-	-	-
15MAR91:01:45	1.33	1.1	1.0	1.0	0.9	0.44	343.13	71.60	0.44	343.13	-3.43	-4.69	-2.70	-	0.59	-	-	-	-	-
15MAR91:02:00	0.92	1.1	1.1	1.0	1.1	0.44	339.10	72.53	0.44	339.10	-4.01	-4.84	-2.85	-	0.74	-	-	-	-	-
15MAR91:02:30	0.80	1.1	1.1	1.1	1.0	0.36	296.80	78.20	0.36	296.80	-4.28	-4.98	-3.05	-	1.13	-	-	-	-	-
15MAR91:03:00	1.19	1.1	1.1	1.1	1.1	0.44	322.50	94.30	0.44	322.50	-4.51	-5.21	-3.18	-	1.58	-	-	-	-	-
15MAR91:03:15	1.23	1.1	1.1	1.1	1.1	0.39	262.90	86.80	0.39	262.90	-5.08	-5.48	-3.29	-	2.06	-	-	-	-	-
15MAR91:03:30	1.64	1.1	1.1	1.1	1.1	0.43	292.50	90.10	0.43	292.50	-5.74	-6.02	-3.47	-	2.80	-	-	-	-	-
15MAR91:03:45	1.90	0.7	1.1	1.1	1.0	0.32	219.60	92.50	0.32	219.60	-5.87	-6.17	-3.50	-	3.08	-	-	-	-	-
15MAR91:04:00	2.20	0.3	0.3	0.7	1.1	0.27	310.30	94.00	0.27	310.30	-5.72	-6.07	-3.43	-	2.90	-	-	-	-	-
15MAR91:04:15	2.47	0.3	0.3	0.7	1.1	0.19	194.50	94.80	0.19	194.50	-5.84	-6.20	-3.47	-	3.22	-	-	-	-	-
15MAR91:04:30	2.64	0.2	0.3	0.3	0.3	0.38	338.30	95.40	0.38	338.30	-5.77	-6.23	-3.38	-	3.07	-	-	-	-	-
15MAR91:04:45	2.85	0.1	0.3	0.3	0.3	0.44	350.10	95.90	0.44	350.10	-6.08	-6.66	-3.54	-	3.32	-	-	-	-	-
15MAR91:05:00	3.06	0.1	0.3	0.3	0.3	0.44	289.30	96.60	0.44	289.30	-6.21	-6.88	-3.67	-	3.52	-	-	-	-	-
15MAR91:05:15	3.06	0.3	0.1	0.1	0.3	0.21	162.20	96.90	0.21	162.20	-6.24	-6.61	-3.58	-	3.48	-	-	-	-	-
15MAR91:05:30	3.20	0.2	0.3	0.1	0.2	0.42	304.00	97.30	0.42	304.00	-6.39	-6.91	-3.71	-	3.70	-	-	-	-	-
15MAR91:05:45	3.50	0.2	0.3	0.1	0.3	0.44	324.30	97.90	0.44	324.30	-6.51	-7.13	-3.82	-	3.95	-	-	-	-	-
15MAR91:06:00	3.59	0.3	0.2	0.2	0.3	0.42	307.20	98.30	0.42	307.20	-6.56	-6.97	-3.81	-	3.80	-	-	-	-	-
15MAR91:06:15	3.47	1.7	0.5	0.2	0.3	0.44	314.00	99.00	0.44	314.00	-6.45	-7.23	-3.96	-	4.00	-	-	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA											
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION (W/M ²)					SOLAR DIFFERENCE BEFORE (W/M ²)	SOLAR DIFFERENCE AFTER (W/M ²)	UTMD DIRECTION (DEGREES)	UTMD MAGNITUDE (MVS)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND (Deg. C)					BACK- GROUND (Deg. C)				
		15-MINS. BEFORE	30-MINS. BEFORE	60-MINS. BEFORE	120-MINS. BEFORE	120-MINS. AFTER						GROUND BUSH	GROUND GRASS	GROUND DIRT ROAD	GROUND SOIL	GROUND TREE	GROUND WATER				
19MAR91:15:15	APG	13.27	752.0	542.1	543.7	776.0	794.0	-24.0	8.84	283.30	42.14	-	16.05	10.97	-	13.39	-	-	-	-	
19MAR91:15:30	APG	12.94	596.6	752.0	542.1	621.4	777.8	-24.8	8.85	275.50	42.68	-	14.04	10.76	-	13.13	-	-	-	-	
19MAR91:15:45	APG	12.47	290.3	596.6	752.0	543.7	825.0	-253.4	7.66	291.40	43.40	-	10.64	8.91	-	11.29	-	-	-	-	
19MAR91:16:00	APG	11.59	153.1	290.3	596.6	542.1	776.0	-609.0	7.92	282.90	44.14	-	10.21	8.51	-	10.62	-	-	-	-	
19MAR91:16:15	APG	11.15	138.0	153.1	290.3	752.0	621.4	-614.0	7.38	285.20	44.99	-	10.26	8.18	-	10.62	-	-	-	-	
19MAR91:16:30	APG	10.94	107.6	138.0	153.1	596.6	543.7	-689.0	7.84	276.50	45.40	-	9.95	7.82	-	10.31	-	-	-	-	
19MAR91:16:45	APG	10.76	88.6	107.6	138.0	290.3	542.1	-201.7	8.01	283.40	45.35	-	9.73	7.54	-	10.13	-	-	-	-	
19MAR91:17:00	APG	10.58	49.9	88.6	107.6	153.1	752.0	-103.2	5.62	280.10	46.39	-	9.23	7.43	-	9.94	-	-	-	-	
19MAR91:17:15	APG	10.39	51.9	49.9	88.6	138.0	596.6	-86.1	6.47	275.30	47.22	-	9.19	7.22	-	9.78	-	-	-	-	
19MAR91:17:30	APG	10.38	84.1	51.9	49.9	107.6	290.3	-23.5	6.83	275.70	48.50	-	9.47	7.22	-	9.88	-	-	-	-	
19MAR91:17:45	APG	9.97	31.5	84.1	51.9	88.6	153.1	-57.1	7.99	280.20	49.54	-	7.45	5.40	-	8.82	-	-	-	-	
19MAR91:18:00	APG	9.48	15.3	31.5	84.1	49.9	138.0	-54.6	6.83	281.80	51.24	-	6.88	5.26	-	8.51	-	-	-	-	
19MAR91:18:15	A-B	9.30	7.0	15.3	31.5	51.9	107.6	-44.8	6.29	280.00	52.54	-	7.31	5.60	-	8.49	-	-	-	-	
19MAR91:18:30	APG	9.12	1.6	7.0	15.3	84.1	88.6	-82.5	7.04	281.50	53.14	-	6.85	5.03	-	8.20	-	-	-	-	
19MAR91:18:45	APG	8.97	0.6	1.6	7.0	31.5	49.9	-30.9	6.55	285.10	53.80	-	6.93	5.27	-	8.12	-	-	-	-	
19MAR91:19:00	APG	8.90	0.4	0.6	1.6	15.3	51.9	-14.8	5.90	286.90	54.33	-	6.52	4.79	-	7.92	-	-	-	-	
19MAR91:19:15	APG	8.84	0.4	0.4	0.6	7.0	84.1	-6.7	5.87	286.40	53.97	-	5.91	4.40	-	7.78	-	-	-	-	
19MAR91:19:30	APG	8.70	0.3	0.4	0.4	1.6	31.5	-1.3	4.76	282.00	54.17	-	6.00	4.55	-	7.76	-	-	-	-	
19MAR91:19:45	APG	8.60	0.4	0.3	0.4	0.6	15.3	-0.1	4.28	269.40	54.54	-	6.14	4.61	-	7.75	-	-	-	-	
19MAR91:20:00	APG	8.56	0.4	0.4	0.3	0.4	7.0	-0.0	5.01	273.00	55.13	-	5.93	4.06	-	7.61	-	-	-	-	
19MAR91:20:15	APG	8.51	0.5	0.4	0.4	0.4	1.6	0.1	5.37	280.50	55.13	-	5.88	3.93	-	7.56	-	-	-	-	
19MAR91:20:30	APG	8.49	0.4	0.5	0.4	0.3	0.6	0.1	6.33	277.80	54.55	-	5.96	3.92	-	7.54	-	-	-	-	
19MAR91:20:45	APG	8.48	0.4	0.4	0.5	0.4	0.4	-0.0	5.42	274.80	54.26	-	6.44	4.36	-	7.73	-	-	-	-	
19MAR91:21:00	APG	8.40	0.5	0.4	0.4	0.4	0.4	0.1	5.39	277.80	54.20	-	5.42	3.49	-	7.30	-	-	-	-	
19MAR91:21:15	APG	8.29	0.3	0.5	0.4	0.5	0.3	-0.2	5.39	280.80	54.09	-	4.49	2.52	-	6.97	-	-	-	-	
19MAR91:21:30	APG	8.15	0.2	0.3	0.5	0.4	0.4	-0.2	4.76	278.10	54.20	-	3.99	2.29	-	6.70	-	-	-	-	
19MAR91:21:45	APG	7.96	0.3	0.2	0.3	0.4	0.4	-0.1	3.89	275.70	54.71	-	3.66	2.05	-	6.59	-	-	-	-	
19MAR91:22:00	APG	7.83	0.2	0.3	0.2	0.5	0.5	-0.3	3.48	277.50	54.86	-	2.58	1.92	-	5.64	-	-	-	-	
19MAR91:22:15	APG	7.72	0.4	0.2	0.3	0.3	0.4	0.1	3.25	265.10	55.34	-	2.50	1.61	-	5.53	-	-	-	-	
19MAR91:22:30	APG	7.57	0.4	0.4	0.2	0.2	0.4	0.2	3.35	265.00	56.10	-	3.03	1.55	-	5.68	-	-	-	-	
19MAR91:22:45	APG	7.70	0.2	0.4	0.4	0.3	0.5	-0.0	4.20	271.20	55.08	-	4.04	2.49	-	6.01	-	-	-	-	
19MAR91:23:00	APG	7.83	0.3	0.2	0.4	0.2	0.3	0.1	4.69	269.80	55.98	-	4.66	2.54	-	6.04	-	-	-	-	
19MAR91:23:15	APG	7.61	0.3	0.3	0.2	0.4	0.2	-0.0	4.02	268.00	56.39	-	4.96	3.22	-	6.14	-	-	-	-	
19MAR91:23:30	APG	7.89	0.3	0.3	0.3	0.4	0.3	-0.1	3.77	258.20	56.79	-	5.17	3.05	-	6.42	-	-	-	-	

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMP- ATURE (Deg. C)	METEOROLOGICAL DATA										RADIOMETRIC DATA									
		SOLAR RADIATION					SOLAR IRR.					BACK-					BACK-				
		SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	15-HRS. BEFORE (W/M ²)	30-HRS. BEFORE (W/M ²)	60-HRS. BEFORE (W/M ²)	120-HRS. BEFORE (W/M ²)	SOLAR DIFFERENCE (W/M ²)	WIND MAGNITUDE (M/S)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)
COLLECTION SITE	AIR TEMP- ATURE (Deg. C)	SOLAR RADIATION					SOLAR IRR.					BACK-					BACK-				
		SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	15-HRS. BEFORE (W/M ²)	30-HRS. BEFORE (W/M ²)	60-HRS. BEFORE (W/M ²)	120-HRS. BEFORE (W/M ²)	SOLAR DIFFERENCE (W/M ²)	WIND MAGNITUDE (M/S)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)	BACK- GROUND DIRT (Deg. C)
19MAR91:23:45	APC	7.97	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	3.81	254.50	57.33	6.45	4.22	-	7.34	-	-	-
20MAR91:00:00	APC	8.02	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	-0.2	4.34	256.70	57.36	5.98	3.71	-	7.16	-	-	-
20MAR91:00:15	APC	7.74	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.0	4.17	267.30	58.71	3.79	1.95	-	6.28	-	-	-
20MAR91:00:30	APC	7.50	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	-0.0	2.83	266.50	60.04	2.45	1.59	-	5.32	-	-	-
20MAR91:00:45	APC	7.35	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-0.0	3.11	271.60	61.95	2.27	1.37	-	5.32	-	-	-
20MAR91:01:00	APC	7.52	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	4.32	264.60	62.18	3.35	1.52	-	5.41	-	-	-
20MAR91:01:15	APC	7.47	0.1	0.4	0.2	0.3	0.3	0.3	0.3	0.3	-0.2	3.73	267.30	62.94	3.28	1.45	-	5.55	-	-	-
20MAR91:01:30	APC	7.64	0.1	0.1	0.4	0.3	0.3	0.3	0.3	0.3	-0.2	4.19	258.70	63.90	3.75	1.57	-	5.68	-	-	-
20MAR91:01:45	APC	7.68	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.0	3.78	265.50	64.56	3.65	1.87	-	5.68	-	-	-
20MAR91:02:00	APC	7.51	0.2	0.2	0.1	0.4	0.3	0.3	0.3	0.3	-0.1	3.41	254.00	64.75	3.31	1.53	-	5.55	-	-	-
20MAR91:02:15	APC	7.49	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	3.49	253.20	65.00	3.29	1.45	-	5.46	-	-	-
20MAR91:02:30	APC	7.28	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	2.27	242.40	65.69	2.54	1.27	-	5.26	-	-	-
20MAR91:02:45	APC	7.09	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.0	1.88	247.60	66.79	1.98	1.17	-	5.17	-	-	-
20MAR91:03:00	APC	7.20	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	-0.0	3.08	254.30	67.71	2.06	0.99	-	5.04	-	-	-
20MAR91:03:15	APC	7.10	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	-0.1	2.30	264.10	68.97	2.31	0.97	-	4.90	-	-	-
20MAR91:03:30	APC	6.97	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-0.0	2.06	258.80	69.84	1.26	0.84	-	5.28	-	-	-
20MAR91:04:00	APC	6.84	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.75	251.70	71.40	0.24	0.66	-	5.16	-	-	-
20MAR91:04:15	APC	6.87	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.62	251.30	72.60	0.12	0.68	-	5.34	-	-	-
20MAR91:04:30	APC	6.52	0.3	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.1	0.49	252.00	73.50	-0.58	0.48	-	5.09	-	-	-
20MAR91:04:45	APC	6.32	0.2	0.3	0.3	0.3	0.3	0.4	0.2	0.2	-0.2	0.34	265.50	76.10	-1.75	0.36	-	4.95	-	-	-
20MAR91:05:00	APC	6.16	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.2	-0.2	0.42	261.60	76.10	-2.02	0.18	-	4.41	-	-	1.51
20MAR91:05:15	APC	5.56	0.4	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.44	225.00	78.20	-2.52	-0.01	-	4.03	-	-	-
20MAR91:05:30	APC	5.22	0.4	0.4	0.1	0.3	0.4	0.1	0.3	0.4	0.1	0.43	256.50	80.50	-2.94	-0.09	-	4.04	-	-	-
20MAR91:05:45	APC	5.30	0.2	0.4	0.4	0.4	0.4	0.4	0.2	0.3	0.0	0.44	257.10	81.60	-3.25	-0.52	-	4.39	-	-	-
20MAR91:06:00	APC	5.36	0.8	0.2	0.2	0.4	0.1	0.1	0.3	0.3	0.7	0.44	257.10	80.50	-3.52	-0.46	-	4.52	-	-	-
20MAR91:06:15	APC	5.36	5.2	0.8	0.2	0.4	0.2	0.4	0.3	0.3	4.8	0.93	280.90	79.00	-2.30	-0.56	-	4.73	-	-	-
20MAR91:06:30	APC	6.13	20.1	5.2	0.8	0.4	0.2	0.4	0.2	0.2	19.7	3.29	292.10	73.00	0.95	0.06	-	4.89	-	-	-
20MAR91:06:45	APC	7.02	54.4	20.1	5.2	0.8	0.4	0.2	0.1	0.4	54.2	2.69	279.50	69.13	2.14	0.29	-	4.82	-	-	-
20MAR91:07:00	APC	7.70	109.5	54.4	20.1	0.8	0.4	0.4	0.4	0.4	108.7	1.61	254.00	66.72	3.16	0.33	-	5.28	-	-	-
20MAR91:07:15	APC	8.68	165.6	109.5	54.4	5.2	0.4	0.4	0.4	0.4	160.4	1.53	276.30	66.79	4.64	0.66	-	5.15	-	-	-
20MAR91:07:30	APC	9.23	228.3	165.6	109.5	20.1	5.2	0.4	0.4	0.4	208.2	2.90	292.10	64.33	5.64	1.15	-	5.77	-	-	-
20MAR91:07:45	APC	9.29	293.8	165.6	109.5	54.4	8.8	0.4	0.4	0.4	239.4	3.31	296.10	60.20	6.94	1.61	-	6.42	-	-	-
20MAR91:08:00	APC	9.61	360.0	293.8	165.6	228.3	109.5	5.2	0.4	0.4	250.5	3.07	292.70	55.61	7.88	1.73	-	7.06	-	-	-

METEOROLOGICAL DATA

RADIOMETRIC DATA

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION				SOLAR RADIATION 15-MINS. BEFORE	SOLAR RADIATION				SOLAR RADIATION 60-MINS. BEFORE	SOLAR RADIATION				SOLAR RADIATION 120-MINS. BEFORE	SOLAR RADIATION 120-MINS. DIFFERENCE	WIND DIRECTION (DEGREES)	WIND SPEED (M/SEC)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND RADIATION				BACK- GROUND RADIATION				BACK- GROUND WATER		
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)						(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)			
ZOHAR01:08:15	APC	9.98	422.8	360.0	293.8	165.6	20.1	257.2	3.35	288.00	53.64	-	9.61	2.28	-	7.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:08:30	APC	9.98	485.9	422.8	360.0	228.3	54.4	257.6	3.63	298.00	50.59	-	9.95	2.85	-	8.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:08:45	APC	9.98	540.2	485.9	422.8	293.8	109.5	254.4	3.38	317.00	49.32	-	11.37	2.66	-	8.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:09:00	APC	10.34	606.9	540.2	485.9	360.0	165.6	246.9	3.65	311.00	48.16	-	13.23	3.10	-	8.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:09:15	APC	10.18	662.8	606.9	540.2	422.8	228.3	240.0	5.13	315.60	46.52	-	12.96	3.79	-	8.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:09:30	APC	10.53	715.0	662.8	606.9	485.9	293.8	229.1	4.04	306.70	45.78	-	15.26	5.70	-	9.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:09:45	APC	10.76	758.0	715.0	662.8	540.2	360.0	209.8	4.57	306.80	45.40	-	15.54	6.90	-	9.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:10:00	APC	10.95	802.0	758.0	715.0	606.9	422.8	195.1	4.19	310.70	44.66	-	17.63	6.66	-	9.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:10:15	APC	11.13	899.0	802.0	758.0	662.8	485.9	176.2	4.09	306.10	44.51	-	17.53	5.93	-	10.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:10:30	APC	11.46	877.0	899.0	802.0	715.0	540.2	162.0	4.28	310.70	43.71	-	18.41	5.70	-	10.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:10:45	APC	12.05	907.0	877.0	899.0	758.0	606.9	149.0	2.89	317.10	43.30	-	21.12	6.18	-	11.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:11:00	APC	12.19	956.0	907.0	877.0	802.0	662.8	134.6	3.21	292.20	42.52	-	21.07	7.76	-	11.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:11:15	APC	12.69	954.0	956.0	907.0	839.0	715.0	115.0	4.31	297.60	41.17	-	21.16	9.93	-	11.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:11:30	APC	12.86	971.0	954.0	956.0	839.0	758.0	94.0	4.48	288.80	40.97	-	21.77	11.19	-	12.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:11:45	APC	12.97	984.0	971.0	954.0	907.0	802.0	77.0	3.82	304.30	40.55	-	22.16	12.08	-	12.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:12:00	APC	13.28	996.0	984.0	971.0	956.0	839.0	60.0	4.69	276.70	40.47	-	22.15	12.83	-	13.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:12:15	APC	13.41	1000.0	996.0	984.0	956.0	877.0	46.0	5.02	297.60	39.48	-	21.51	12.42	-	12.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:12:30	APC	13.53	999.0	1000.0	996.0	971.0	907.0	18.0	4.31	292.90	39.29	-	22.61	13.39	-	13.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:12:45	APC	13.74	980.0	999.0	1000.0	966.0	956.0	-4.8	3.64	275.10	40.32	-	22.46	14.08	-	14.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:13:00	APC	14.20	971.0	980.0	989.0	996.0	954.0	-25.0	4.43	282.20	39.44	-	22.43	14.12	-	14.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:13:15	APC	14.41	953.0	971.0	980.0	1000.0	971.0	-45.0	5.43	287.60	38.33	-	22.16	14.20	-	14.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:13:30	APC	14.42	933.0	953.0	971.0	989.0	954.0	-56.0	4.86	301.50	37.75	-	21.27	14.22	-	14.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:13:45	APC	15.02	885.0	933.0	953.0	989.0	954.0	-95.0	4.03	288.20	38.78	-	21.93	14.88	-	14.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:14:00	APC	15.33	869.0	885.0	933.0	971.0	1000.0	-102.0	4.14	281.80	38.17	-	23.10	15.37	-	15.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:14:15	APC	15.44	839.0	869.0	885.0	953.0	989.0	-116.0	4.58	285.10	37.53	-	22.39	15.51	-	15.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:14:30	APC	15.69	798.0	839.0	869.0	933.0	989.0	-135.0	3.53	295.20	37.66	-	21.38	15.77	-	15.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:14:45	APC	16.12	755.0	798.0	839.0	885.0	971.0	-130.0	3.76	270.00	37.37	-	21.76	15.74	-	16.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:15:00	APC	16.26	710.0	755.0	798.0	869.0	953.0	-159.0	4.67	286.80	36.63	-	19.96	15.70	-	16.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:15:15	APC	16.06	660.7	710.0	755.0	839.0	933.0	-187.3	5.51	277.30	36.14	-	18.81	15.26	-	16.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:15:30	APC	16.18	610.8	660.7	710.0	798.0	885.0	-187.2	5.05	278.90	35.81	-	18.57	15.26	-	16.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:15:45	APC	16.20	556.6	610.8	660.7	755.0	869.0	-198.4	4.06	296.80	35.92	-	17.25	14.96	-	16.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:16:00	APC	16.07	499.7	556.6	610.8	710.0	839.0	-210.3	4.44	288.30	35.13	-	16.64	14.47	-	16.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:16:15	APC	15.96	439.5	499.7	556.6	660.7	798.0	-221.2	4.33	298.90	34.51	-	15.87	14.06	-	16.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZOHAR01:16:30	APC	15.91	377.3	439.5	499.7	610.8	755.0	-233.5	4.26	296.00	34.67	-	14.83	13.37	-	16.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix C Meteorological and Radiometric Data

C17

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMP- ATURE (DEG. C)	METEOROLOGICAL DATA						RADIOMETRIC DATA											
		SOLAR RADIATION 15-MINS. BEFORE			SOLAR RADIATION 30-MINS. BEFORE			SOLAR RADIATION 60-MINS. BEFORE			SOLAR RADIATION 120-MINS. BEFORE			WIND DIRECTION		WIND VELOCITY		RELATIVE HUMIDITY	
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(DEGREES)	(CM/SEC)	(PERCENT)	(DEG. C)	(DEG. C)	(DEG. C)
21MAR91:01:15	APC	5.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	125.80	81.49	1.89	3.51	6.09
21MAR91:01:30	APC	6.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	221.20	79.20	1.87	3.45	6.13
21MAR91:01:45	APC	6.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	197.30	73.30	2.08	3.55	6.21
21MAR91:02:00	APC	6.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.25	22.54	79.40	3.28	3.63	5.88
21MAR91:02:15	APC	5.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	72.60	87.40	3.56	3.96	6.20
21MAR91:02:30	APC	5.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	69.11	86.70	4.17	4.42	5.94
21MAR91:02:45	APC	6.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.65	46.06	86.70	4.46	4.34	5.75
21MAR91:03:00	APC	6.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	48.48	85.20	4.51	4.45	5.73
21MAR91:03:15	APC	6.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	63.36	85.00	4.72	4.68	5.84
21MAR91:03:30	APC	6.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	82.10	85.10	4.63	4.68	5.74
21MAR91:03:45	APC	6.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	74.00	85.10	4.49	4.64	5.75
21MAR91:04:00	APC	6.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	73.50	82.80	4.91	4.76	5.93
21MAR91:04:15	APC	6.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	73.00	79.10	5.12	5.04	6.24
21MAR91:04:30	APC	6.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32	65.00	77.30	5.39	5.03	6.18
21MAR91:04:45	APC	7.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	71.20	76.60	5.30	4.98	6.08
21MAR91:05:00	APC	7.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.07	83.30	77.10	5.17	4.98	5.96
21MAR91:05:15	APC	7.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.47	68.32	78.90	5.42	5.16	6.19
21MAR91:05:30	APC	6.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.70	63.65	80.80	5.38	5.09	6.18
21MAR91:05:45	APC	6.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	62.18	81.70	5.41	5.30	6.13
21MAR91:06:00	APC	6.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	43.81	80.60	5.52	5.29	6.20
21MAR91:06:15	APC	6.82	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	65.12	79.70	5.41	5.32	6.16
21MAR91:06:30	APC	6.83	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	44.30	79.20	5.69	5.30	6.30
21MAR91:06:45	APC	6.81	8.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	61.42	78.90	5.91	5.55	6.32
21MAR91:07:00	APC	6.96	19.7	8.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	279.70	76.70	6.45	5.63	6.42
21MAR91:07:15	APC	7.24	26.2	19.7	8.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	43.38	76.90	6.51	6.03	6.56
21MAR91:07:30	APC	7.36	47.7	26.2	19.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.1	61.33	80.30	7.18	6.37	6.87
21MAR91:07:45	APC	7.62	100.8	47.7	26.2	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.3	76.50	81.70	8.07	6.66	7.66
21MAR91:08:00	APC	7.76	100.2	100.8	47.7	19.7	0.2	80.5	1.38	65.79	78.50	80.5	1.38	65.79	78.50	80.5	8.03	7.01	7.68
21MAR91:08:15	APC	-	-	100.2	100.8	26.2	2.6	-	-	-	-	-	-	-	-	-	8.48	7.28	8.16
21MAR91:08:30	APC	-	-	100.2	100.2	47.7	8.5	-	-	-	-	-	-	-	-	-	8.38	-	-
21MAR91:12:00	FTD	2.42	116.7	-	-	-	-	-	-	-	-	-	-	3.09	253.50	100.00	-	-	-
25MAR91:12:15	FTD	2.69	105.3	-	-	-	-	-	-	-	-	-	-	3.60	230.90	99.90	-	-	-
25MAR91:12:30	FTD	2.83	159.0	-	-	-	-	-	-	-	-	-	-	3.99	227.70	99.50	-	-	-
25MAR91:12:45	FTD	3.22	276.6	-	-	-	-	-	-	-	-	-	-	4.06	224.40	99.00	6.25	-	-

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMP- ATURE (Deg. C)	METEOROLOGICAL DATA										RADIOMETRIC DATA									
		SOLAR RADIATION					TIME					SMC					SMC				
		15-HRS. BEFORE	30-HRS. BEFORE	45-HRS. BEFORE	60-HRS. BEFORE	75-HRS. BEFORE	SOLAR RADIATION (W/M ²)	SOLAR RADIATION (W/M ²)	SOLAR RADIATION (W/M ²)	120-HRS. DIFFERENCE	SOLAR RADIATION (W/M ²)	WIND (M/S)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	
25MAR91:13:00	FTD	3.27	286.2	-	-	-	-	-	-	-	6.51	230.30	96.20	-	-	-	-	-	-	-	
25MAR91:13:15	FTD	3.41	191.0	-	-	-	-	-	-	-	3.34	214.00	97.90	-	-	-	-	-	-	-	
25MAR91:13:30	FTD	3.23	102.2	-	-	-	-	-	-	-	3.43	209.20	97.80	-	-	-	-	-	-	-	
25MAR91:13:45	FTD	3.04	98.8	102.2	276.6	116.7	191.0	276.6	116.7	-177.8	3.96	215.90	98.10	-	-	-	-	-	-	-	
25MAR91:14:00	FTD	3.06	154.2	98.8	102.2	105.3	191.0	105.3	105.3	-150.0	4.42	229.30	98.20	-	-	-	-	-	-	-	
25MAR91:14:15	FTD	3.07	116.7	134.2	98.8	116.7	191.0	116.7	116.7	-76.3	4.08	227.80	98.30	-	-	-	-	-	-	-	
25MAR91:14:30	FTD	3.07	95.8	116.7	134.2	102.2	191.0	102.2	102.2	-6.4	3.99	228.00	98.40	-	-	-	-	-	-	-	
25MAR91:14:45	FTD	3.06	60.9	95.8	116.7	98.8	191.0	98.8	98.8	-37.9	4.15	232.80	98.50	-	-	-	-	-	-	-	
25MAR91:15:00	FTD	3.00	70.9	60.9	95.8	134.2	191.0	134.2	134.2	-63.3	4.10	243.00	98.60	-	-	-	-	-	-	-	
25MAR91:15:15	FTD	3.07	95.9	70.9	60.9	114.7	191.0	114.7	114.7	-20.8	4.24	243.30	97.70	-	-	-	-	-	-	-	
25MAR91:15:30	FTD	3.29	99.0	93.9	70.9	95.8	191.0	95.8	95.8	3.2	3.64	240.70	97.50	-	-	-	-	-	-	-	
25MAR91:15:45	FTD	3.21	50.5	99.0	93.9	60.9	191.0	60.9	60.9	-10.4	3.06	236.80	97.50	-	-	-	-	-	-	-	
25MAR91:16:00	FTD	3.08	41.2	50.5	99.0	70.9	191.0	70.9	70.9	-29.7	3.27	231.80	97.60	-	-	-	-	-	-	-	
25MAR91:16:15	FTD	3.01	36.4	41.2	50.5	93.9	191.0	93.9	93.9	-59.5	3.50	230.10	97.70	-	-	-	-	-	-	-	
25MAR91:16:30	FTD	3.00	29.9	36.4	41.2	99.0	191.0	40.9	40.9	-69.1	3.16	230.10	97.70	-	-	-	-	-	-	-	
25MAR91:16:45	FTD	2.98	23.3	29.9	36.4	50.5	191.0	50.5	50.5	-27.2	2.94	228.70	97.80	-	-	-	-	-	-	-	
25MAR91:17:00	FTD	2.94	23.6	23.3	29.9	41.2	191.0	41.2	41.2	-17.6	2.98	226.60	97.90	-	-	-	-	-	-	-	
25MAR91:17:15	FTD	2.97	37.4	23.6	23.3	34.4	191.0	34.4	34.4	3.0	3.18	230.40	97.90	-	-	-	-	-	-	-	
25MAR91:17:30	FTD	3.01	30.1	37.4	23.6	29.9	191.0	29.9	29.9	0.1	2.93	223.90	98.00	-	-	-	-	-	-	-	
25MAR91:17:45	FTD	2.93	13.3	30.1	37.4	23.3	191.0	23.3	23.3	-10.0	2.89	223.80	98.10	-	-	-	-	-	-	-	
25MAR91:18:00	FTD	2.79	7.2	13.3	30.1	23.6	191.0	23.6	23.6	-16.4	3.25	216.80	98.30	-	-	-	-	-	-	-	
25MAR91:18:15	FTD	2.58	2.5	7.2	13.3	37.4	191.0	37.4	37.4	-34.9	3.40	220.20	98.60	-	-	-	-	-	-	-	
25MAR91:18:30	FTD	2.46	0.0	2.5	7.2	30.1	191.0	30.1	30.1	-30.1	3.39	217.50	98.70	-	-	-	-	-	-	-	
25MAR91:18:45	FTD	2.38	0.0	0.0	2.5	13.3	191.0	13.3	13.3	-13.3	3.06	217.80	99.00	-	-	-	-	-	-	-	
25MAR91:19:00	FTD	2.37	0.0	0.0	0.0	0.0	191.0	0.0	0.0	-7.2	2.89	213.20	99.20	-	-	-	-	-	-	-	
25MAR91:19:15	FTD	2.38	0.0	0.0	0.0	0.0	191.0	0.0	0.0	-2.5	2.98	211.70	99.30	-	-	-	-	-	-	-	
25MAR91:19:30	FTD	2.39	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	3.22	208.50	99.30	-	-	-	-	-	-	-	
25MAR91:19:45	FTD	2.37	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	3.38	212.30	99.40	-	-	-	-	-	-	-	
25MAR91:20:00	FTD	2.29	0.0	0.0	0.0	0.0	191.0	0.0	0.0	2.5	2.97	232.40	99.60	-	-	-	-	-	-	-	
25MAR91:20:15	FTD	2.21	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	2.95	229.90	99.90	-	-	-	-	-	-	-	
25MAR91:20:30	FTD	2.17	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	2.56	243.10	100.00	-	-	-	-	-	-	-	
25MAR91:20:45	FTD	2.15	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	2.35	260.70	100.00	-	-	-	-	-	-	-	
25MAR91:21:00	FTD	2.10	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	2.19	275.90	100.00	-	-	-	-	-	-	-	
25MAR91:21:15	FTD	2.00	0.0	0.0	0.0	0.0	191.0	0.0	0.0	0.0	1.40	264.40	100.00	-	-	-	-	-	-	-	

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMP- ATURE (Deg. C)	METEOROLOGICAL DATA					RADIOMETRIC DATA									
		SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION BEFORE (W/M ²)	1hr. SOLAR RADIATION BEFORE (W/M ²)	UTMO DIRECTION (DEGREES)	UTMO RELATIVE HUMIDITY	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)
25MAR91:21:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	1.41	263.40	100.00	1.51	1.26	-	-	-	-
25MAR91:21:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	1.38	271.10	100.00	1.46	1.32	-	-	-	-
25MAR91:22:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.56	259.30	100.00	1.52	1.44	-	-	-	-
25MAR91:22:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	256.80	100.00	1.54	1.48	-	-	-	-
25MAR91:22:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.43	281.70	100.00	1.52	1.49	-	-	-	-
25MAR91:22:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.45	237.60	100.00	1.39	1.41	-	-	-	-
25MAR91:23:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.86	208.60	100.00	1.39	1.40	-	-	-	-
25MAR91:23:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.82	215.20	100.00	1.49	1.51	-	-	-	-
25MAR91:23:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	217.20	100.00	1.46	1.48	-	-	-	-
25MAR91:23:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	211.00	100.00	1.20	1.13	-	-	-	-
25MAR91:00:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	214.60	100.00	1.10	1.08	-	-	-	-
25MAR91:00:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.45	199.20	100.00	1.00	0.81	-	-	-	-
25MAR91:00:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	201.80	100.00	0.76	0.54	-	-	-	-
25MAR91:00:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.45	217.20	100.00	0.58	0.21	-	-	-	-
25MAR91:01:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.45	233.60	100.00	0.51	0.16	-	-	-	-
25MAR91:01:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.45	233.00	100.00	0.53	0.16	-	-	-	-
25MAR91:01:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.39	198.30	100.00	0.89	6.73	-	-	-	-
25MAR91:01:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	196.20	100.00	1.22	1.05	-	-	-	-
25MAR91:02:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	190.90	100.00	1.20	1.00	-	-	-	-
25MAR91:02:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	200.50	100.00	1.07	0.97	-	-	-	-
25MAR91:02:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	207.60	100.00	1.00	0.96	-	-	-	-
25MAR91:02:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	191.30	100.00	0.99	0.85	-	-	-	-
25MAR91:03:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	188.40	100.00	0.97	0.86	-	-	-	-
25MAR91:03:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.43	202.20	100.00	0.88	0.82	-	-	-	-
25MAR91:03:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	206.40	100.00	0.89	0.85	-	-	-	-
25MAR91:03:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	193.90	100.00	0.86	0.81	-	-	-	-
25MAR91:04:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.43	168.50	100.00	0.89	0.89	-	-	-	-
25MAR91:04:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.43	145.30	100.00	0.85	0.93	-	-	-	-
25MAR91:04:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.43	188.60	100.00	0.75	0.78	-	-	-	-
25MAR91:04:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.43	200.20	100.00	0.62	0.60	-	-	-	-
25MAR91:05:00	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.40	178.20	100.00	0.44	0.40	-	-	-	-
25MAR91:05:15	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.40	149.30	100.00	0.41	0.28	-	-	-	-
25MAR91:05:30	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	113.20	100.00	0.15	0.09	-	-	-	-
25MAR91:05:45	FTD	0.0	0.0	0.0	0.0	0.0	0.0	0.44	105.70	100.00	0.09	0.09	-	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA							
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION 15-MINS. BEFORE (W/M ²)	SOLAR RADIATION 30-MINS. BEFORE (W/M ²)	SOLAR RADIATION 60-MINS. BEFORE (W/M ²)	SOLAR RADIATION 120-MINS. BEFORE (W/M ²)	DIFFERENCE (W/M ²)	UTMD (M/S)	UTMD (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND SOIL (Deg. C)	BACK- GROUND GRASS (Deg. C)	BACK- GROUND DIRT ROAD (Deg. C)	BACK- GROUND SOIL (Deg. C)	BACK- GROUND TREE (Deg. C)	BACK- GROUND WATER (Deg. C)	
20MAR91:06:00	FTD	0.69	0.8	0.0	0.0	0.0	0.0	0.44	107.00	100.00	0.20	0.39	-	-	-	-	
20MAR91:06:15	FTD	0.75	5.3	0.8	0.0	0.0	5.3	0.44	113.90	100.00	0.48	0.67	-	-	-	-	
20MAR91:06:30	FTD	0.80	13.5	5.3	0.8	0.0	13.5	0.45	113.90	100.00	0.52	0.95	-	-	-	-	
20MAR91:06:45	FTD	0.89	26.0	13.5	5.3	0.0	26.0	0.46	107.40	100.00	0.86	1.42	-	-	-	-	
20MAR91:07:00	FTD	1.06	39.8	26.0	13.5	0.8	39.0	0.45	116.30	100.00	1.21	1.94	-	-	-	-	
20MAR91:07:15	FTD	1.26	55.3	39.8	26.0	5.3	56.0	0.44	109.00	100.00	1.55	2.39	-	-	-	-	
20MAR91:07:30	FTD	1.50	71.0	55.3	39.8	13.5	57.5	0.45	127.60	100.00	1.77	2.77	-	-	-	-	
20MAR91:07:45	FTD	1.76	85.2	71.0	55.3	26.0	57.2	1.35	125.40	100.00	2.00	3.05	-	-	-	-	
20MAR91:08:00	FTD	1.99	106.7	85.2	71.0	39.8	66.9	1.26	128.10	100.00	2.39	3.70	-	-	-	-	
20MAR91:08:15	FTD	2.28	134.7	106.7	85.2	55.3	79.4	1.42	123.00	100.00	2.87	4.21	-	-	-	-	
20MAR91:08:30	FTD	2.65	182.6	134.7	106.7	71.0	111.6	1.83	119.90	99.80	3.47	5.30	-	-	-	-	
20MAR91:08:45	FTD	3.01	211.9	182.6	134.7	85.2	126.7	2.13	122.80	99.30	3.99	6.07	-	-	-	-	
20MAR91:09:00	FTD	3.38	250.2	211.9	182.6	106.7	143.5	2.08	138.60	98.50	4.57	6.74	-	-	-	-	
20MAR91:09:15	FTD	3.89	266.0	250.2	211.9	134.7	71.8	1.66	142.40	97.30	4.99	7.29	-	-	-	-	
20MAR91:09:30	FTD	4.49	328.9	266.0	250.2	182.6	85.2	1.50	151.20	95.20	5.73	8.28	-	-	-	-	
20MAR91:09:45	FTD	4.76	314.3	328.9	266.0	211.9	106.7	1.72	156.00	95.10	5.84	8.36	-	-	-	-	
20MAR91:10:00	FTD	4.89	306.3	314.3	328.9	250.2	134.7	1.97	195.20	90.30	6.41	9.49	-	-	-	-	
20MAR91:10:15	FTD	5.35	402.8	306.3	314.3	266.0	182.6	1.35	178.00	88.60	6.92	10.04	-	-	-	-	
20MAR91:10:30	FTD	5.30	281.2	402.8	306.3	328.9	211.9	1.85	186.80	87.10	6.10	8.36	-	-	-	-	
20MAR91:10:45	FTD	5.15	224.8	281.2	402.8	314.3	250.2	2.19	179.10	84.40	5.84	7.95	-	-	-	-	
20MAR91:11:00	FTD	5.42	269.4	224.8	281.2	306.3	266.0	1.57	166.80	81.40	6.02	8.11	-	-	-	-	
20MAR91:11:15	FTD	5.30	181.4	269.4	234.8	402.8	328.9	2.06	202.60	78.70	5.28	6.86	-	-	-	-	
20MAR91:11:30	FTD	5.25	164.1	181.4	269.4	281.2	314.3	2.25	179.60	77.70	5.42	6.56	-	-	-	-	
20MAR91:11:45	FTD	5.44	173.5	164.1	181.4	234.8	306.3	8.97	150.50	75.60	5.79	6.94	-	-	-	-	
20MAR91:12:00	FTD	5.75	200.4	173.5	164.1	249.4	402.8	31.0	132.90	74.60	6.75	8.50	-	-	-	-	
20MAR91:12:15	FTD	5.77	218.6	200.4	173.5	181.4	281.2	2.64	121.90	75.80	6.39	7.61	-	-	-	-	
20MAR91:12:30	FTD	6.19	310.6	218.6	200.4	166.1	234.8	2.36	138.50	74.20	7.31	9.14	-	-	-	-	
20MAR91:12:45	FTD	6.35	311.4	310.6	218.6	173.5	249.4	3.25	127.30	72.60	7.36	8.75	-	-	-	-	
20MAR91:13:00	FTD	6.30	315.7	311.4	310.6	181.4	166.1	35.3	128.30	71.80	7.06	8.11	-	-	-	-	
20MAR91:13:15	FTD	6.73	504.9	315.7	311.4	218.6	166.1	286.5	4.04	127.70	70.70	8.90	10.76	-	-	-	
20MAR91:13:30	FTD	7.15	561.6	504.9	315.7	310.6	173.5	4.35	122.50	67.62	9.15	11.32	-	-	-	-	
20MAR91:13:45	FTD	7.03	521.3	561.6	504.9	311.4	281.2	209.9	108.70	67.27	8.49	10.11	-	-	-	-	
20MAR91:14:00	FTD	7.22	541.4	521.3	561.6	315.7	218.6	4.62	125.70	66.95	8.74	10.46	-	-	-	-	
20MAR91:14:15	FTD	7.88	591.5	541.4	521.3	504.9	310.6	3.90	134.40	65.76	9.53	11.56	-	-	-	-	

METEOROLOGICAL DATA															RADIO-METRIC DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMP- ATURE (Deg. C)	SOLAR					SOLAR					100- SOLAR DIFFERENCE (W/M ²)	UTM MAGNITUDE (N/S)	UTM DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		SOLAR RADIATION 15-HRS. BEFORE (W/M ²)	SOLAR RADIATION 30-HRS. BEFORE (W/M ²)	SOLAR RADIATION 60-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)					SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)	SOLAR RADIATION 120-HRS. BEFORE (W/M ²)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
20MAR91:14:30	FTD	8.28	509.3	591.5	541.4	541.4	311.4	27.7	3.99	141.90	66.47	9.36	11.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DAY AND TIME OF VISITED COLLECTION SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
	AIR					SOLAR					WIND					BACK-				
	TEMP- MIDDE (Deg. C)	SOLAR RADIATION (KWH/2)	15-MIN. BEFORE (KWH/2)	30-MIN. BEFORE (KWH/2)	60-MIN. BEFORE (KWH/2)	120-MIN. BEFORE (KWH/2)	SOLAR RADIATION (KWH/2)	SOLAR RADIATION (KWH/2)	SOLAR RADIATION (KWH/2)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	BACK- GROUND RADIATION (KWH/2)	BACK- GROUND RADIATION (KWH/2)	BACK- GROUND RADIATION (KWH/2)	BACK- GROUND RADIATION (KWH/2)	BACK- GROUND RADIATION (KWH/2)
26MAR91:23:00	7.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.83	68.59	122.20	5.86	5.54	-	-	-	-	-
26MAR91:23:15	6.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.95	68.57	126.20	5.95	5.67	-	-	-	-	-
26MAR91:23:30	6.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.04	68.46	119.50	5.96	5.57	-	-	-	-	-
26MAR91:23:45	6.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.03	68.56	122.50	5.85	5.53	-	-	-	-	-
27MAR91:00:00	6.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.87	68.45	126.10	5.87	5.57	-	-	-	-	-
27MAR91:00:15	7.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.64	68.38	116.40	6.03	5.67	-	-	-	-	-
27MAR91:00:30	7.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.91	68.45	119.20	6.06	5.59	-	-	-	-	-
27MAR91:00:45	7.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.67	67.95	121.50	5.54	4.96	-	-	-	-	-
27MAR91:01:00	7.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.82	67.48	126.50	5.23	4.68	-	-	-	-	-
27MAR91:01:15	7.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.04	67.50	126.50	5.45	5.86	-	-	-	-	-
27MAR91:01:30	7.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.30	67.67	125.90	5.36	4.95	-	-	-	-	-
27MAR91:01:45	6.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.70	68.61	126.40	4.77	4.16	-	-	-	-	-
27MAR91:02:00	6.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.30	68.22	126.80	4.77	4.10	-	-	-	-	-
27MAR91:02:15	6.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.60	68.26	125.30	4.65	3.82	-	-	-	-	-
27MAR91:02:30	6.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.29	68.61	125.80	5.07	4.75	-	-	-	-	-
27MAR91:02:45	6.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.31	68.79	121.90	5.48	5.85	-	-	-	-	-
27MAR91:03:00	6.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.97	68.25	126.30	6.03	5.79	-	-	-	-	-
27MAR91:03:15	7.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.25	67.43	125.40	6.16	5.69	-	-	-	-	-
27MAR91:03:30	6.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.21	67.75	126.90	5.82	4.41	-	-	-	-	-
27MAR91:03:45	6.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.19	68.21	127.20	6.21	4.95	-	-	-	-	-
27MAR91:04:00	6.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.48	68.85	135.60	5.31	4.92	-	-	-	-	-
27MAR91:04:15	6.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.21	68.83	128.20	5.99	5.69	-	-	-	-	-
27MAR91:04:30	6.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.81	68.86	128.70	6.02	5.68	-	-	-	-	-
27MAR91:04:45	6.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.69	68.96	132.80	6.22	6.01	-	-	-	-	-
27MAR91:05:00	7.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.29	68.45	131.80	6.91	6.56	-	-	-	-	-
27MAR91:05:15	7.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.66	68.01	133.80	7.82	6.60	-	-	-	-	-
27MAR91:05:30	7.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.23	68.00	136.10	7.88	6.77	-	-	-	-	-
27MAR91:05:45	7.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.00	68.00	133.30	7.86	6.80	-	-	-	-	-
27MAR91:06:00	7.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.77	68.11	131.90	7.36	6.79	-	-	-	-	-
27MAR91:06:15	7.65	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.79	68.42	130.90	7.88	6.78	-	-	-	-	-
27MAR91:06:30	7.59	10.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.59	68.70	125.40	7.82	6.75	-	-	-	-	-
27MAR91:06:45	7.59	25.0	10.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	7.74	69.89	129.10	7.11	6.90	-	-	-	-	-
27MAR91:07:00	7.69	32.1	25.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	7.52	69.32	138.30	7.35	7.17	-	-	-	-	-
27MAR91:07:15	7.78	44.8	32.1	25.0	2.5	0.0	0.0	0.0	0.0	0.0	7.92	69.76	128.30	7.48	7.36	-	-	-	-	-

DAY AND TIME OF VISIT COLLECTION SITE	AIR TEMPERATURE (Deg. C)	METEOROLOGICAL DATA				RADIOMETRIC DATA											
		SOLAR RADIATION				WIND				MOISTURE				BACK-SCATTER			
		15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	60-MINS. BEFORE	DIFFERENCE (WIND)	WIND DIRECTION	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	WIND DIRECTION	WIND SPEED (M/S)	WIND DIRECTION	WIND SPEED (M/S)	WIND DIRECTION	WIND SPEED (M/S)	WIND DIRECTION	WIND SPEED (M/S)
2700091:07:30	26.85	66.8	32.1	10.6	0.8	-	191.90	0.45	52.70	7.25	6.59	-	-	-	-	-	-
1000091:11:00	26.46	920.0	-	-	-	-	91.00	0.44	52.86	-	-	-	-	-	-	-	-
1000091:11:15	26.59	909.0	-	-	-	-	136.90	0.29	51.27	-	-	-	-	-	-	-	-
1000091:11:45	26.85	1000.0	-	-	-	-	20.27	0.40	51.48	-	-	-	-	-	-	-	-
1000091:12:00	26.18	1011.0	-	-	-	-	310.99	0.43	52.09	-	-	-	-	-	-	-	-
1000091:12:15	26.26	1015.0	-	-	-	-	282.10	0.44	51.53	-	-	-	-	-	-	-	-
1000091:12:30	26.31	1039.0	-	-	-	-	227.60	0.44	51.85	-	-	-	-	-	-	-	-
1000091:12:45	26.34	1091.0	1015.0	1000.0	962.0	83.0	204.00	0.44	51.82	-	-	-	-	-	-	-	-
1000091:13:00	26.00	976.0	1091.0	1015.0	950.0	-35.0	173.00	0.44	52.42	-	-	-	-	-	-	-	-
1000091:13:15	23.99	960.0	1070.0	1015.0	909.0	-47.0	150.00	0.45	52.72	-	-	-	-	-	-	-	-
1000091:13:30	24.17	958.0	960.0	1039.0	1000.0	-83.0	136.30	0.45	53.90	-	-	-	-	-	-	-	-
1000091:13:45	24.28	961.0	956.0	1091.0	1011.0	-150.0	126.90	0.45	52.16	-	-	-	-	-	-	-	-
1000091:14:00	24.26	918.0	961.0	956.0	976.0	-50.0	117.00	0.45	52.63	26.82	25.20	-	-	36.32	-	-	-
1000091:14:15	24.52	895.0	918.0	900.0	1039.0	-73.0	123.30	0.45	52.29	23.64	25.12	-	-	33.94	-	-	-
1000091:14:30	24.39	863.0	895.0	918.0	956.0	-93.0	116.00	0.46	51.00	26.71	26.23	-	-	34.20	-	-	-
1000091:14:45	24.00	844.0	863.0	895.0	961.0	-97.0	109.30	0.49	53.10	23.80	24.53	-	-	32.91	-	-	-
1000091:15:00	23.91	671.5	844.0	863.0	920.0	-306.5	100.00	0.36	53.26	28.40	24.85	-	-	33.76	-	-	-
1000091:15:15	22.60	609.3	611.5	864.0	895.0	-425.7	85.00	5.23	53.56	26.51	26.97	-	-	33.00	-	-	-
1000091:15:30	22.49	609.3	611.5	863.0	961.0	-508.6	69.94	6.93	52.76	26.00	23.97	-	-	33.20	-	-	-
1000091:15:45	-	276.6	609.3	864.0	918.0	-	-	-	-	23.79	23.72	-	-	33.01	-	-	-
1000091:16:00	-	-	276.6	611.5	895.0	-	-	-	-	22.85	22.83	-	-	31.48	-	-	-
1000091:16:15	-	-	-	609.3	863.3	-	-	-	-	20.70	19.80	-	-	27.68	-	-	-
1000091:16:30	21.81	176.6	-	-	611.5	-	36.62	6.00	53.95	20.85	19.20	-	-	28.02	-	-	-
1000091:16:45	21.51	143.8	176.6	-	609.3	-	14.11	2.83	55.48	20.09	19.47	-	-	26.05	-	-	-
1000091:17:00	20.17	56.6	162.8	-	409.3	-	355.10	2.18	70.00	18.82	17.95	-	-	25.80	-	-	-
1000091:17:15	18.13	49.7	56.6	143.8	-	-	270.00	0.30	68.40	16.47	15.48	-	-	24.10	-	-	-
1000091:17:30	17.81	100.2	49.7	56.6	176.6	-	270.00	0.00	68.40	15.47	15.48	-	-	21.02	-	-	-
1000091:17:45	17.16	140.3	100.2	49.7	143.8	-	270.00	0.00	68.40	15.47	15.48	-	-	20.39	-	-	-
1000091:18:00	17.71	205.1	140.3	100.2	56.6	-	270.00	0.00	68.40	15.47	15.48	-	-	22.20	-	-	-
1000091:18:15	17.73	66.1	205.1	140.3	49.7	-	270.00	0.00	68.40	15.47	15.48	-	-	22.80	-	-	-
1000091:18:30	17.18	18.7	66.1	205.1	143.8	-	270.00	0.00	68.40	15.47	15.48	-	-	21.42	-	-	-
1000091:18:45	16.62	37.2	18.7	66.1	140.3	-	270.00	0.00	68.40	15.47	15.48	-	-	20.19	-	-	-
1000091:19:00	-	-	-	-	-	-	-	-	-	-	-	-	-	20.07	-	-	-

DAY AND TIME OF VISITED COLLECTION SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
	AIR TEMPERATURE BEFORE (DEG. C)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION 15-MINS. BEFORE (W/M ²)	SOLAR RADIATION 30-MINS. BEFORE (W/M ²)	SOLAR RADIATION 45-MINS. BEFORE (W/M ²)	SOLAR RADIATION 120-MINS. BEFORE (W/M ²)	DIFFERENCE SOLAR-RADIATION (W/M ²)	WIND DIRECTION (DEGREES)	WIND SPEED (MPS)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS	BACK- GROUND COUNT ROSS
10.AUG.91:19:15	16.55	42.1	37.2	18.7	205.1	49.7	-163.8	0.00	270.00	95.90	16.04	15.90	16.04	15.90	16.04	15.90	16.04	15.90	16.04	15.90
10.AUG.91:19:30	16.40	17.7	42.1	37.2	18.7	160.2	-48.4	0.00	270.00	96.00	15.85	15.82	15.85	15.82	15.85	15.82	15.85	15.82	15.85	15.82
10.AUG.91:19:45	16.27	9.1	17.7	42.1	18.7	160.3	-9.6	0.00	270.00	96.20	15.67	15.59	15.67	15.59	15.67	15.59	15.67	15.59	15.67	15.59
10.AUG.91:20:00	16.12	6.2	9.1	17.7	37.2	205.1	-31.9	0.00	270.00	96.20	15.65	15.42	15.65	15.42	15.65	15.42	15.65	15.42	15.65	15.42
10.AUG.91:20:15	15.96	16.8	6.2	9.1	42.1	66.1	-28.1	0.00	270.00	96.30	15.52	15.26	15.52	15.26	15.52	15.26	15.52	15.26	15.52	15.26
10.AUG.91:20:30	15.87	13.1	16.0	6.2	17.7	18.7	-4.5	1.27	305.20	96.40	15.29	15.14	15.29	15.14	15.29	15.14	15.29	15.14	15.29	15.14
10.AUG.91:20:45	15.72	4.4	13.1	16.0	9.1	37.2	-4.7	1.26	309.00	96.40	15.06	14.71	15.06	14.71	15.06	14.71	15.06	14.71	15.06	14.71
10.AUG.91:21:00	15.65	0.2	4.4	13.1	6.2	42.1	-6.8	1.43	310.12	96.40	15.22	14.91	15.22	14.91	15.22	14.91	15.22	14.91	15.22	14.91
10.AUG.91:21:15	15.48	0.0	0.2	4.4	14.8	17.7	-16.8	1.62	25.65	96.50	15.28	14.95	15.28	14.95	15.28	14.95	15.28	14.95	15.28	14.95
10.AUG.91:21:30	15.42	0.0	0.0	0.2	13.1	9.1	-13.1	2.08	37.62	96.60	15.14	14.81	15.14	14.81	15.14	14.81	15.14	14.81	15.14	14.81
10.AUG.91:21:45	15.50	0.0	0.0	0.0	0.0	4.4	-4.4	2.26	56.40	96.70	15.13	14.83	15.13	14.83	15.13	14.83	15.13	14.83	15.13	14.83
10.AUG.91:22:00	15.53	0.0	0.0	0.0	0.2	14.8	-0.2	2.07	70.60	96.60	15.06	14.72	15.06	14.72	15.06	14.72	15.06	14.72	15.06	14.72
10.AUG.91:22:15	15.36	0.0	0.0	0.0	0.0	13.1	0.0	1.87	97.90	96.60	14.88	14.45	14.88	14.45	14.88	14.45	14.88	14.45	14.88	14.45
10.AUG.91:22:30	15.34	0.0	0.0	0.0	0.0	6.6	6.6	1.89	114.40	96.70	14.82	14.59	14.82	14.59	14.82	14.59	14.82	14.59	14.82	14.59
10.AUG.91:22:45	15.36	0.0	0.0	0.0	0.0	0.0	0.0	2.02	131.70	96.73	14.80	14.52	14.80	14.52	14.80	14.52	14.80	14.52	14.80	14.52
10.AUG.91:23:00	15.25	0.0	0.0	0.0	0.0	0.0	0.0	1.89	143.10	96.70	14.70	14.36	14.70	14.36	14.70	14.36	14.70	14.36	14.70	14.36
10.AUG.91:23:15	15.08	0.0	0.0	0.0	0.0	0.0	0.0	1.85	165.70	96.70	14.51	14.25	14.51	14.25	14.51	14.25	14.51	14.25	14.51	14.25
10.AUG.91:23:30	14.94	0.0	0.0	0.0	0.0	0.0	0.0	1.76	180.00	96.70	14.39	14.02	14.39	14.02	14.39	14.02	14.39	14.02	14.39	14.02
10.AUG.91:23:45	14.87	0.0	0.0	0.0	0.0	0.0	0.0	1.51	192.50	96.80	14.30	14.00	14.30	14.00	14.30	14.00	14.30	14.00	14.30	14.00
11.AUG.91:00:00	14.78	0.0	0.0	0.0	0.0	0.0	0.0	1.29	206.00	96.80	14.19	13.57	14.19	13.57	14.19	13.57	14.19	13.57	14.19	13.57
11.AUG.91:00:15	14.66	0.0	0.0	0.0	0.0	0.0	0.0	1.10	213.00	96.80	14.16	13.54	14.16	13.54	14.16	13.54	14.16	13.54	14.16	13.54
11.AUG.91:00:30	14.54	0.0	0.0	0.0	0.0	0.0	0.0	1.56	225.50	96.90	14.05	13.76	14.05	13.76	14.05	13.76	14.05	13.76	14.05	13.76
11.AUG.91:00:45	14.55	0.0	0.0	0.0	0.0	0.0	0.0	1.58	234.50	96.90	14.10	13.80	14.10	13.80	14.10	13.80	14.10	13.80	14.10	13.80
11.AUG.91:01:00	14.49	0.0	0.0	0.0	0.0	0.0	0.0	0.95	246.20	97.00	13.96	13.34	13.96	13.34	13.96	13.34	13.96	13.34	13.96	13.34
11.AUG.91:01:15	14.23	0.0	0.0	0.0	0.0	0.0	0.0	1.04	250.50	97.00	13.36	12.14	13.36	12.14	13.36	12.14	13.36	12.14	13.36	12.14
11.AUG.91:01:30	13.78	0.0	0.0	0.0	0.0	0.0	0.0	0.65	262.30	97.10	12.62	10.90	12.62	10.90	12.62	10.90	12.62	10.90	12.62	10.90
11.AUG.91:01:45	12.90	0.0	0.0	0.0	0.0	0.0	0.0	0.57	259.80	97.20	11.39	9.83	11.39	9.83	11.39	9.83	11.39	9.83	11.39	9.83
11.AUG.91:02:00	11.95	0.0	0.0	0.0	0.0	0.0	0.0	0.86	256.40	97.30	11.05	9.68	11.05	9.68	11.05	9.68	11.05	9.68	11.05	9.68
11.AUG.91:02:15	11.53	0.0	0.0	0.0	0.0	0.0	0.0	1.16	228.40	97.40	11.13	10.45	11.13	10.45	11.13	10.45	11.13	10.45	11.13	10.45
11.AUG.91:02:30	11.42	0.0	0.0	0.0	0.0	0.0	0.0	1.05	208.70	97.60	10.81	10.20	10.81	10.20	10.81	10.20	10.81	10.20	10.81	10.20
11.AUG.91:02:45	11.43	0.0	0.0	0.0	0.0	0.0	0.0	1.72	197.80	97.70	10.75	10.19	10.75	10.19	10.75	10.19	10.75	10.19	10.75	10.19
11.AUG.91:03:00	11.30	0.0	0.0	0.0	0.0	0.0	0.0	1.47	197.00	97.80	10.90	10.61	10.90	10.61	10.90	10.61	10.90	10.61	10.90	10.61
11.AUG.91:03:15	11.25	0.0	0.0	0.0	0.0	0.0	0.0	1.68	202.00	97.70	11.37	11.23	11.37	11.23	11.37	11.23	11.37	11.23	11.37	11.23
11.AUG.91:03:30	12.16	0.0	0.0	0.0	0.0	0.0	0.0	1.40	217.02	97.70	12.08	11.88	12.08	11.88	12.08	11.88	12.08	11.88	12.08	11.88

METEOROLOGICAL DATA										RADIOMETRIC DATA									
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION			SOLAR RADIATION			SOLAR RADIATION			WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK-SCATTER			BACK-SCATTER		
		15-MINS. BEFORE	30-MINS. BEFORE	60-MINS. BEFORE	120-MINS. BEFORE	120-MINS. DIFFERENCE	120-MINS. DIFFERENCE	120-MINS. DIFFERENCE	120-MINS. DIFFERENCE	120-MINS. DIFFERENCE				GROUND BIOT	GROUND BIOT	GROUND BIOT	GROUND BIOT	GROUND BIOT	GROUND BIOT
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)				(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)
11.AUG.91:05:45	FTB	12.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.25	261.40	97.70	12.68	12.38	-	15.20	-	-
11.AUG.91:06:00	FTB	12.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.56	275.18	97.60	12.51	12.21	-	15.00	-	-
11.AUG.91:06:15	FTB	12.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.45	316.20	97.60	12.66	12.31	-	14.93	-	-
11.AUG.91:06:30	FTB	12.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	344.60	97.60	12.70	12.36	-	14.99	-	-
11.AUG.91:06:45	FTB	12.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.56	1.46	97.60	12.69	12.21	-	14.79	-	-
11.AUG.91:07:00	FTB	12.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50	11.91	97.70	12.61	12.16	-	14.79	-	-
11.AUG.91:07:15	FTB	12.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.61	22.29	97.60	12.59	12.35	-	14.87	-	-
11.AUG.91:07:30	FTB	13.05	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.52	35.33	97.66	12.72	12.28	-	14.83	-	-
11.AUG.91:07:45	FTB	13.19	11.2	1.7	0.0	0.0	0.0	0.0	0.0	11.2	1.33	47.18	97.60	12.78	12.25	-	14.59	-	-
11.AUG.91:08:00	FTB	12.98	26.6	11.2	1.7	0.0	0.0	0.0	0.0	26.6	1.32	54.35	97.60	12.32	11.66	-	14.10	-	-
11.AUG.91:08:15	FTB	12.85	28.4	26.6	11.2	0.0	0.0	0.0	0.0	28.4	1.19	60.07	97.60	12.49	12.27	-	14.69	-	-
11.AUG.91:08:30	FTB	13.31	26.9	28.4	26.6	1.7	0.0	0.0	0.0	25.2	0.77	68.08	97.70	13.26	13.16	-	15.34	-	-
11.AUG.91:08:45	FTB	13.81	45.1	26.9	28.4	11.2	0.0	0.0	0.0	33.9	0.77	81.90	97.56	13.79	13.79	-	15.67	-	-
11.AUG.91:09:00	FTB	14.39	71.3	45.1	26.9	26.6	0.0	0.0	0.0	66.7	1.06	94.80	97.50	14.48	14.49	-	16.08	-	-
11.AUG.91:09:15	FTB	15.06	81.3	71.3	45.1	26.6	0.0	0.0	0.0	92.5	0.62	103.48	97.20	14.99	15.20	-	16.66	-	-
11.AUG.91:09:30	FTB	15.89	113.5	81.3	71.3	26.9	11.2	0.0	0.0	86.6	0.45	104.80	97.00	15.90	16.19	-	16.80	-	-
11.AUG.91:09:45	FTB	16.33	117.5	113.5	81.3	45.1	26.6	0.0	0.0	72.4	0.67	96.80	96.80	15.89	16.17	-	16.81	-	-
11.AUG.91:10:00	FTB	16.86	276.0	117.5	113.5	71.3	26.6	0.0	0.0	204.7	1.10	87.18	96.60	16.45	17.16	-	17.45	-	-
11.AUG.91:10:15	FTB	18.64	513.1	276.0	117.5	81.3	26.9	431.8	1.71	76.70	95.60	18.33	19.72	-	19.83	-	19.77	-	-
11.AUG.91:10:30	FTB	19.50	377.1	513.1	276.0	113.5	45.1	263.6	1.71	68.78	96.30	17.79	18.81	-	19.77	-	21.01	-	-
11.AUG.91:10:45	FTB	20.08	521.1	577.1	513.1	117.5	71.3	403.6	0.99	30.04	91.29	18.52	20.17	-	21.60	-	21.60	-	-
11.AUG.91:10:00	FTB	21.64	611.4	532.0	521.1	276.0	81.3	256.0	1.21	17.47	85.00	18.89	20.56	-	22.52	-	22.52	-	-
11.AUG.91:10:15	FTB	22.17	678.4	611.4	532.0	377.1	113.5	98.3	1.32	352.80	79.30	19.77	21.42	-	23.70	-	23.70	-	-
11.AUG.91:10:30	FTB	22.98	727.0	679.4	611.4	521.1	276.0	225.9	1.27	315.60	67.54	21.40	23.05	-	25.24	-	25.24	-	-
11.AUG.91:10:45	FTB	23.14	736.0	727.0	679.4	679.4	532.0	513.1	1.62	304.80	67.63	21.03	23.03	-	26.87	-	26.87	-	-
11.AUG.91:11:00	FTB	23.18	754.0	736.0	727.0	611.4	611.4	377.1	1.73	294.80	66.33	21.81	23.13	-	25.31	-	25.31	-	-
11.AUG.91:11:15	FTB	23.39	653.6	754.0	736.0	679.4	521.1	25.8	1.00	286.50	64.90	21.75	22.77	-	25.49	-	25.49	-	-
11.AUG.91:11:30	FTB	23.23	701.0	653.6	754.0	727.0	679.4	532.0	1.00	277.50	64.51	20.92	22.44	-	25.01	-	25.01	-	-
11.AUG.91:11:45	FTB	23.37	673.5	653.6	701.0	653.6	611.4	104.1	1.78	287.00	62.31	21.76	22.59	-	25.37	-	25.37	-	-
11.AUG.91:12:00	FTB	22.87	653.6	673.5	631.9	701.0	754.0	679.4	2.54	257.50	58.43	21.86	23.54	-	26.16	-	26.16	-	-
11.AUG.91:12:15	FTB	24.10	1030.0	853.0	673.5	631.9	653.6	727.0	2.61	236.90	59.32	22.14	25.09	-	26.34	-	26.34	-	-
11.AUG.91:12:30	FTB	23.33	759.0	1030.0	853.0	673.5	701.0	736.0	3.17	235.30	53.73	28.90	26.07	-	28.39	-	28.39	-	-
11.AUG.91:12:45	FTB	23.33	759.0	1030.0	853.0	673.5	754.0	754.0	3.14	219.20	52.52	23.66	23.66	-	26.39	-	26.39	-	-

DAY AND TIME OF VISITED COLLECTION SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
	AIR					SOLAR					SOLAR					SOLAR				
	TEMPERATURE (DEG. C)	WIND (M/S)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	WIND DIRECTION (DEGREES)
11.AUG.91:12:15	24.51	1042.0	759.0	1030.0	673.5	653.6	348.5	2.75	289.20	47.50	25.53	26.44	29.55	-	29.55	-	29.55	-	29.55	-
11.AUG.91:12:30	25.14	1017.0	759.0	1030.0	653.6	701.0	164.0	2.29	282.90	44.72	26.11	26.63	30.59	-	30.59	-	30.59	-	30.59	-
11.AUG.91:12:45	25.29	1036.0	1017.0	1042.0	1030.0	631.9	0.0	2.45	195.60	41.50	25.80	26.61	30.92	-	30.92	-	30.92	-	30.92	-
11.AUG.91:13:00	26.97	1042.0	1030.0	1017.0	759.0	673.5	283.0	2.68	195.90	42.44	25.74	26.71	32.07	-	32.07	-	32.07	-	32.07	-
11.AUG.91:13:15	26.42	979.1	1042.0	1030.0	1042.0	653.0	-462.9	2.65	184.60	43.55	23.70	23.34	28.31	-	28.31	-	28.31	-	28.31	-
11.AUG.91:13:30	26.03	923.0	579.1	1042.0	1017.0	1030.0	-94.0	2.17	173.20	44.27	24.68	25.09	29.64	-	29.64	-	29.64	-	29.64	-
11.AUG.91:13:45	25.41	858.0	923.0	579.1	1030.0	759.0	-172.0	2.09	184.30	43.24	25.04	26.18	31.91	-	31.91	-	31.91	-	31.91	-
11.AUG.91:14:00	21.95	109.7	858.0	923.0	1042.0	1042.0	605.9	2.29	119.70	79.60	19.30	21.19	27.67	-	27.67	-	27.67	-	27.67	-
11.AUG.91:14:15	19.32	905.0	109.7	858.0	579.1	1017.0	405.9	2.29	119.70	79.60	19.30	21.19	27.67	-	27.67	-	27.67	-	27.67	-
11.AUG.91:14:30	21.38	975.0	905.0	109.7	923.0	1030.0	52.0	2.40	134.00	74.30	23.30	24.27	29.85	-	29.85	-	29.85	-	29.85	-
11.AUG.91:14:45	22.46	953.0	975.0	905.0	858.0	1042.0	95.0	2.53	151.46	64.74	25.02	25.55	30.10	-	30.10	-	30.10	-	30.10	-
11.AUG.91:15:00	23.34	926.0	953.0	905.0	109.7	579.1	736.3	2.23	144.70	59.64	26.30	25.50	30.21	-	30.21	-	30.21	-	30.21	-
11.AUG.91:15:15	24.12	843.0	926.0	905.0	905.0	923.0	-142.0	2.45	185.70	57.00	26.71	26.08	30.47	-	30.47	-	30.47	-	30.47	-
11.AUG.91:15:30	24.54	923.0	843.0	926.0	975.0	858.0	-52.0	2.20	200.50	51.58	27.27	25.63	29.51	-	29.51	-	29.51	-	29.51	-
11.AUG.91:15:45	24.80	342.3	923.0	843.0	923.0	905.0	-590.7	1.23	216.20	49.54	24.82	23.16	27.82	-	27.82	-	27.82	-	27.82	-
11.AUG.91:16:00	24.21	352.0	342.3	923.0	342.3	905.0	-574.0	1.80	208.00	51.08	22.64	22.20	23.82	-	23.82	-	23.82	-	23.82	-
11.AUG.91:16:15	23.89	479.7	352.0	342.3	843.0	975.0	-343.3	2.84	193.50	50.43	21.26	20.34	24.02	-	24.02	-	24.02	-	24.02	-
11.AUG.91:16:30	24.98	807.0	479.7	352.0	923.0	953.0	-114.0	3.55	208.00	47.75	25.70	26.37	29.96	-	29.96	-	29.96	-	29.96	-
11.AUG.91:16:45	25.21	607.9	807.0	479.7	342.3	926.0	305.6	3.53	215.70	47.07	28.20	25.09	30.25	-	30.25	-	30.25	-	30.25	-
11.AUG.91:17:00	25.27	643.1	687.9	807.0	352.0	613.0	291.1	3.43	223.30	47.54	25.24	24.30	29.94	-	29.94	-	29.94	-	29.94	-
11.AUG.91:17:15	25.13	505.3	643.1	687.9	479.7	923.0	105.6	3.54	239.60	47.82	24.84	23.84	29.69	-	29.69	-	29.69	-	29.69	-
11.AUG.91:17:30	24.85	536.9	505.3	643.1	807.0	342.3	-270.1	3.92	232.60	44.30	24.04	22.72	29.00	-	29.00	-	29.00	-	29.00	-
11.AUG.91:17:45	24.57	443.5	536.9	505.3	687.9	352.0	-204.4	3.57	228.00	46.00	23.65	22.96	29.08	-	29.08	-	29.08	-	29.08	-
11.AUG.91:18:00	24.39	421.2	443.5	536.9	643.1	479.7	-221.9	3.11	227.90	49.02	23.79	22.67	29.17	-	29.17	-	29.17	-	29.17	-
11.AUG.91:18:15	24.26	392.2	421.2	443.5	505.3	807.0	-193.1	3.10	228.20	50.35	23.31	22.63	29.00	-	29.00	-	29.00	-	29.00	-
11.AUG.91:18:30	23.95	341.2	392.2	421.2	536.9	687.9	-195.7	3.44	225.50	51.25	22.53	22.09	28.02	-	28.02	-	28.02	-	28.02	-
11.AUG.91:18:45	23.25	290.0	341.2	421.2	443.5	643.1	-193.5	4.56	213.80	55.13	21.31	20.69	26.21	-	26.21	-	26.21	-	26.21	-
11.AUG.91:19:00	22.31	211.9	290.0	341.2	421.2	505.3	-179.3	5.16	192.00	55.81	20.09	19.78	25.23	-	25.23	-	25.23	-	25.23	-
11.AUG.91:19:15	21.82	194.8	241.9	290.0	392.2	536.9	-197.4	4.80	169.60	57.04	19.85	19.50	24.12	-	24.12	-	24.12	-	24.12	-
11.AUG.91:19:30	21.43	152.0	194.8	241.9	341.2	443.5	-189.2	4.29	145.20	57.43	19.59	18.78	23.08	-	23.08	-	23.08	-	23.08	-
11.AUG.91:19:45	20.99	112.8	152.0	194.8	290.0	421.2	-177.2	4.11	120.20	58.97	19.47	18.38	22.08	-	22.08	-	22.08	-	22.08	-
11.AUG.91:20:00	20.51	50.6	112.8	152.0	241.9	392.2	-173.3	3.27	94.60	62.61	18.99	17.72	21.23	-	21.23	-	21.23	-	21.23	-
11.AUG.91:20:15	19.93	30.5	50.6	112.8	194.8	341.2	-156.3	2.81	70.10	67.28	18.56	16.89	20.62	-	20.62	-	20.62	-	20.62	-
11.AUG.91:20:30	19.22	19.2	30.5	50.6	152.0	290.0	-132.8	2.48	41.71	72.00	17.61	16.12	19.90	-	19.90	-	19.90	-	19.90	-

DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	METEOROLOGICAL DATA					RADIOMETRIC DATA									
		SOLAR RADIATION		SOLAR RADIATION		SOLAR DIFFERENCE (U/W/2)	SOLAR SHADOW MAGNITUDE (U/W/2)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK-					BACK- GROUND WATER (Deg. C)
		BEFORE (U/W/2)	AFTER (U/W/2)	BEFORE (U/W/2)	AFTER (U/W/2)						GROUND	DIRT ROAD	GRASS	SOIL	GROUND	
11JUL91:20:45	18.50	9.2	19.2	38.5	112.8	241.9	-103.6	2.22	1.35	76.50	16.69	15.11	15.11	19.26	19.26	-
11JUL91:21:00	17.91	2.0	9.2	19.2	68.6	194.8	-66.6	1.26	347.00	80.30	16.42	14.91	14.91	18.86	18.86	-
11JUL91:21:15	17.42	0.0	2.0	9.2	38.5	152.0	-38.5	0.00	270.00	82.60	15.90	13.74	13.74	18.32	18.32	-
11JUL91:21:30	17.02	0.0	0.0	0.0	19.2	112.8	-19.2	0.00	270.00	84.00	15.58	13.99	13.99	18.12	18.12	-
11JUL91:21:45	16.80	0.0	0.0	0.0	9.2	68.6	-9.2	0.00	270.00	85.10	15.34	13.68	13.68	17.94	17.94	-
11JUL91:22:00	16.83	0.0	0.0	0.0	2.0	38.5	-2.0	0.00	270.00	85.90	15.51	14.21	14.21	17.89	17.89	-
11JUL91:22:15	16.67	0.0	0.0	0.0	0.0	19.2	0.0	0.00	270.00	87.00	15.44	14.06	14.06	17.69	17.69	-
11JUL91:22:30	16.46	0.0	0.0	0.0	0.0	9.2	0.0	0.00	270.00	87.90	15.13	13.54	13.54	17.34	17.34	-
11JUL91:22:45	16.19	0.0	0.0	0.0	0.0	2.0	0.0	0.00	270.00	88.80	14.81	13.22	13.22	17.03	17.03	-
11JUL91:23:00	15.73	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	89.90	13.64	11.64	11.64	16.28	16.28	-
11JUL91:23:15	15.44	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	90.30	14.12	11.27	11.27	15.92	15.92	-
11JUL91:23:30	15.31	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	90.20	13.70	10.96	10.96	15.88	15.88	-
11JUL91:23:45	14.58	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	91.00	13.07	10.45	10.45	15.56	15.56	-
12JUL91:00:00	14.69	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	92.30	13.48	11.20	11.20	15.63	15.63	-
12JUL91:00:15	14.83	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	92.50	13.85	11.41	11.41	15.59	15.59	-
12JUL91:00:30	15.04	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	92.60	14.16	11.92	11.92	15.78	15.78	-
12JUL91:00:45	13.36	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	92.80	12.00	10.67	10.67	15.10	15.10	-
12JUL91:01:00	12.24	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	94.80	11.28	10.37	10.37	14.71	14.71	-
12JUL91:01:15	11.93	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	96.20	11.14	10.44	10.44	14.61	14.61	-
12JUL91:01:30	12.70	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	96.80	12.48	10.94	10.94	14.79	14.79	-
12JUL91:01:45	14.61	0.0	0.0	0.0	0.0	0.0	0.0	0.00	270.00	96.30	14.01	13.06	13.06	15.47	15.47	-
12JUL91:02:00	15.13	0.0	0.0	0.0	0.0	0.0	0.0	1.57	15.95	96.30	14.01	13.06	13.06	15.29	15.29	-
12JUL91:02:15	15.38	0.0	0.0	0.0	0.0	0.0	0.0	1.87	19.00	95.20	13.99	13.14	13.14	14.96	14.96	-
12JUL91:02:30	14.28	0.0	0.0	0.0	0.0	0.0	0.0	1.61	125.00	94.20	13.95	12.61	12.61	14.56	14.56	-
12JUL91:02:45	12.60	0.0	0.0	0.0	0.0	0.0	0.0	1.54	148.10	93.50	12.78	10.98	10.98	14.56	14.56	-
12JUL91:03:00	12.05	0.0	0.0	0.0	0.0	0.0	0.0	2.22	111.20	96.00	11.16	10.33	10.33	13.93	13.93	-
12JUL91:03:15	11.51	0.0	0.0	0.0	0.0	0.0	0.0	1.51	104.40	96.60	10.71	9.96	9.96	13.68	13.68	-
12JUL91:03:30	11.12	0.0	0.0	0.0	0.0	0.0	0.0	1.55	102.70	97.00	10.28	9.54	9.54	13.40	13.40	-
12JUL91:03:45	10.75	0.0	0.0	0.0	0.0	0.0	0.0	1.95	104.10	97.30	10.07	9.26	9.26	13.28	13.28	-
12JUL91:04:00	10.93	0.0	0.0	0.0	0.0	0.0	0.0	1.90	109.70	97.50	10.56	9.66	9.66	13.43	13.43	-
12JUL91:04:15	11.33	0.0	0.0	0.0	0.0	0.0	0.0	2.25	128.90	97.50	10.85	10.26	10.26	13.46	13.46	-
12JUL91:04:30	11.27	0.0	0.0	0.0	0.0	0.0	0.0	2.22	154.40	97.60	10.75	10.06	10.06	13.33	13.33	-
12JUL91:04:45	11.29	0.0	0.0	0.0	0.0	0.0	0.0	2.31	177.00	97.60	10.82	10.16	10.16	13.28	13.28	-
12JUL91:05:00	11.35	0.0	0.0	0.0	0.0	0.0	0.0	2.25	198.80	97.60	10.81	10.23	10.23	13.21	13.21	-

[illegible]

METEOROLOGICAL DATA											RADIO-METRIC DATA									
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (DEG. C)	SOLAR RADIATION (W/M ²)					WIND					RELATIVE HUMIDITY (PERCENT)	BACK- GROUND					BACK- GROUND WATER (DEG. C)		
		BEFORE (W/M ²)	15-MINS. BEFORE (W/M ²)	30-MINS. BEFORE (W/M ²)	45-MINS. BEFORE (W/M ²)	60-MINS. BEFORE (W/M ²)	120-MINS. BEFORE (W/M ²)	SPEED (M/S)	DIRECTION (DEGREES)	DIRT (DEG. C)	GRASS (DEG. C)		SOIL (DEG. C)	TREE (DEG. C)						
16JUL91:00:45	APC	18.82	0.0	0.0	0.0	0.0	0.0	0.55	13.28	86.40	-	14.68	20.63	16.65	18.95	-				
16JUL91:01:00	APC	18.45	0.0	0.0	0.0	0.0	0.0	0.50	13.35	90.00	-	15.09	20.50	16.47	19.00	-				
16JUL91:01:15	APC	18.74	0.0	0.0	0.0	0.0	0.0	0.38	81.40	90.10	-	15.26	20.61	16.63	19.24	-				
16JUL91:01:30	APC	19.00	0.0	0.0	0.0	0.0	0.0	0.41	26.49	89.70	-	15.34	20.44	16.60	19.31	-				
16JUL91:01:45	APC	19.41	0.0	0.0	0.0	0.0	0.0	0.32	186.90	91.60	-	14.87	18.41	16.49	19.59	-				
16JUL91:02:00	APC	19.51	0.0	0.0	0.0	0.0	0.0	0.26	8.19	91.50	-	15.31	17.34	16.42	18.95	-				
16JUL91:02:15	APC	18.71	0.0	0.0	0.0	0.0	0.0	1.87	32.87	92.40	-	15.73	17.84	16.64	18.95	-				
16JUL91:02:30	APC	17.94	0.0	0.0	0.0	0.0	0.0	0.43	30.32	94.00	-	16.08	17.46	16.49	19.21	-				
16JUL91:02:45	APC	18.57	0.0	0.0	0.0	0.0	0.0	0.38	3.50	95.20	-	16.26	18.65	16.82	19.68	-				
16JUL91:03:00	APC	18.97	0.0	0.0	0.0	0.0	0.0	0.45	26.40	95.10	-	15.65	19.22	17.01	19.95	-				
16JUL91:03:15	APC	18.75	0.0	0.0	0.0	0.0	0.0	0.44	26.36	95.10	-	15.08	18.14	16.68	19.29	-				
16JUL91:03:30	APC	18.55	0.0	0.0	0.0	0.0	0.0	0.50	22.50	95.30	-	14.81	17.08	16.27	18.85	-				
16JUL91:03:45	APC	18.33	0.0	0.0	0.0	0.0	0.0	0.45	9.47	95.60	-	14.50	16.92	16.18	18.64	-				
16JUL91:04:00	APC	18.21	0.0	0.0	0.0	0.0	0.0	0.44	64.33	95.70	-	14.05	17.24	16.11	18.49	-				
16JUL91:04:15	APC	18.01	0.0	0.0	0.0	0.0	0.0	0.64	85.80	95.80	-	14.28	16.55	15.92	18.25	-				
16JUL91:04:30	APC	17.08	0.0	0.0	0.0	0.0	0.0	0.90	64.47	95.90	-	14.02	17.08	15.62	17.79	-				
16JUL91:04:45	APC	16.66	0.0	0.0	0.0	0.0	0.0	0.41	43.48	96.10	-	14.07	15.87	15.43	18.08	-				
16JUL91:05:00	APC	16.71	0.0	0.0	0.0	0.0	0.0	0.68	354.80	96.23	-	14.36	16.21	15.27	17.48	-				
16JUL91:05:15	APC	17.25	0.0	0.0	0.0	0.0	0.0	0.42	357.00	96.20	-	15.27	16.60	15.31	17.55	-				
16JUL91:05:30	APC	17.75	0.0	0.0	0.0	0.0	0.0	0.44	16.35	96.10	-	15.16	16.34	15.36	17.43	-				
16JUL91:05:45	APC	17.48	1.8	0.0	0.0	0.0	0.0	0.45	32.51	96.20	-	15.07	16.41	15.57	18.01	-				
16JUL91:06:00	APC	17.86	8.1	1.8	0.0	0.0	0.0	0.45	32.47	96.10	-	15.20	16.56	15.84	18.21	-				
16JUL91:06:15	APC	18.23	32.3	8.1	1.8	0.0	0.0	0.44	22.50	96.10	-	15.59	17.15	16.20	18.67	-				
16JUL91:06:30	APC	18.65	72.0	32.3	8.1	1.8	0.0	0.44	52.86	95.90	-	16.35	17.65	16.50	18.32	-				
16JUL91:06:45	APC	19.43	114.4	72.0	32.3	1.8	0.0	0.44	52.86	95.60	-	17.19	17.89	16.98	18.80	-				
16JUL91:07:00	APC	20.65	163.9	114.4	72.0	8.1	0.0	0.43	13.16	95.90	-	18.28	18.35	17.42	19.09	-				
16JUL91:07:15	APC	22.10	213.8	163.9	114.4	32.3	0.0	0.45	17.19	95.90	-	19.48	18.85	17.86	19.54	-				
16JUL91:07:30	APC	23.39	265.1	213.8	163.9	72.0	1.8	0.44	27.67	92.00	-	20.62	19.52	18.47	20.18	-				
16JUL91:07:45	APC	24.51	313.0	265.1	213.8	163.9	8.1	0.47	22.11	89.70	-	21.51	20.32	19.34	20.97	-				
16JUL91:08:00	APC	24.75	365.7	313.0	265.1	163.9	32.3	1.19	23.25	88.60	-	22.10	20.99	20.40	21.78	-				
16JUL91:08:15	APC	24.69	413.1	365.7	313.0	213.8	72.0	1.63	34.48	88.80	-	22.60	21.73	22.34	22.80	-				
16JUL91:08:30	APC	24.94	463.3	413.1	365.7	265.1	114.4	1.63	35.77	88.00	-	23.41	21.73	21.76	22.85	-				
16JUL91:08:45	APC	25.66	510.7	463.3	413.1	313.0	163.9	1.34	50.11	86.50	-	24.20	22.16	21.51	23.75	-				
16JUL91:09:00	APC	26.10	560.0	510.7	463.3	365.7	213.8	1.62	54.90	84.86	-	25.51	23.21	22.45	24.15	-				

METEOROLOGICAL DATA												RADIOMETRIC DATA							
DAY AND TIME OF VISITS COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION		SOLAR RADIATION	
		BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER
16.AUG.91:17:45	APC	30.13	452.0	499.7	547.1	630.8	746.0	-176.8	2.13	222.30	43.37	-	31.26	37.05	41.73	29.30	-	30.64	36.25
16.AUG.91:18:00	APC	30.89	481.4	452.0	499.7	591.9	706.8	-195.5	2.15	211.20	44.30	-	30.64	36.25	40.42	29.57	-	29.59	35.18
16.AUG.91:18:15	APC	29.88	353.2	401.4	452.0	547.1	671.4	-195.9	2.23	223.20	46.30	-	29.59	35.18	39.12	29.05	-	28.78	33.98
16.AUG.91:18:30	APC	29.62	303.5	353.2	401.4	499.7	630.8	-196.2	2.35	225.50	48.79	-	28.78	33.98	36.84	29.28	-	28.48	32.91
16.AUG.91:18:45	APC	29.38	253.8	303.5	353.2	452.0	591.9	-196.2	2.07	212.40	49.55	-	28.48	32.91	34.08	29.42	-	27.44	31.91
16.AUG.91:19:00	APC	29.09	203.3	253.8	303.5	401.4	547.1	-196.1	2.48	202.20	49.59	-	26.09	30.74	33.07	28.69	-	25.96	29.01
16.AUG.91:19:15	APC	28.82	167.1	203.3	253.5	353.2	499.7	-186.1	2.29	195.70	48.05	-	25.35	27.96	27.36	26.28	-	22.50	27.04
16.AUG.91:19:30	APC	28.57	121.8	167.1	203.3	303.5	452.0	-181.7	1.90	202.10	58.22	-	23.96	29.01	29.84	27.17	-	22.22	26.50
16.AUG.91:19:45	APC	28.21	87.3	121.8	167.1	253.8	401.4	-166.5	2.44	199.70	53.61	-	23.35	27.96	27.36	26.28	-	21.50	25.98
16.AUG.91:20:00	APC	27.87	49.3	87.3	121.8	203.3	353.2	-154.0	2.25	201.50	54.32	-	21.33	25.49	21.85	23.93	-	21.18	25.77
16.AUG.91:20:15	APC	27.62	22.2	49.3	87.3	167.1	303.5	-144.9	2.75	205.80	53.58	-	21.85	25.31	21.58	24.04	-	21.50	25.98
16.AUG.91:20:30	APC	27.46	8.4	22.2	49.3	121.8	253.8	-113.4	2.84	205.60	52.32	-	22.22	26.50	24.04	24.87	-	21.50	25.98
16.AUG.91:20:45	APC	27.34	1.9	8.4	22.2	87.3	203.3	-85.4	2.59	210.50	51.04	-	22.20	26.33	23.35	25.01	-	21.50	25.98
16.AUG.91:21:00	APC	27.24	0.0	1.9	8.4	49.3	167.1	-49.3	2.37	198.30	50.42	-	21.50	25.98	22.56	24.49	28.59	21.50	25.98
16.AUG.91:21:15	APC	27.19	0.0	0.0	1.9	22.2	121.8	-22.2	2.79	200.00	50.35	-	21.18	25.77	22.12	24.09	-	21.50	25.98
16.AUG.91:21:30	APC	27.00	0.0	0.0	0.0	8.4	87.3	-8.4	2.50	194.20	53.17	-	21.33	25.49	21.85	23.93	-	21.50	25.98
16.AUG.91:21:45	APC	26.65	0.0	0.0	0.0	1.9	49.3	-1.9	2.75	195.30	57.60	-	21.85	25.31	21.58	24.04	-	21.50	25.98
16.AUG.91:22:00	APC	26.48	0.0	0.0	0.0	0.0	22.2	0.0	2.85	198.40	58.21	-	22.45	25.20	21.81	24.41	-	21.50	25.98
16.AUG.91:22:15	APC	26.39	0.0	0.0	0.0	0.0	8.4	0.0	3.04	195.10	61.03	-	22.80	25.23	22.00	24.76	-	21.50	25.98
16.AUG.91:22:30	APC	26.19	0.0	0.0	0.0	0.0	1.9	0.0	3.19	192.00	64.29	-	22.60	24.93	21.89	24.67	-	21.50	25.98
16.AUG.91:22:45	APC	26.02	0.0	0.0	0.0	0.0	0.0	0.0	3.03	196.20	64.85	-	22.53	24.86	21.89	24.49	-	21.50	25.98
16.AUG.91:23:00	APC	25.95	0.0	0.0	0.0	0.0	0.0	0.0	2.95	183.40	68.20	-	23.02	24.72	21.87	24.63	27.75	21.50	25.98
16.AUG.91:23:15	APC	25.90	0.0	0.0	0.0	0.0	0.0	0.0	3.26	192.40	69.15	-	23.15	24.65	22.13	24.86	-	21.50	25.98
16.AUG.91:23:30	APC	25.82	0.0	0.0	0.0	0.0	0.0	0.0	3.41	200.00	69.99	-	22.89	24.35	21.86	24.58	-	21.50	25.98
16.AUG.91:23:45	APC	25.82	0.0	0.0	0.0	0.0	0.0	0.0	3.83	196.10	70.10	-	22.76	24.34	21.86	24.56	-	21.50	25.98
17.AUG.91:00:00	APC	25.74	0.0	0.0	0.0	0.0	0.0	0.0	3.72	197.60	71.20	-	22.51	24.13	21.71	24.40	-	21.50	25.98
17.AUG.91:00:15	APC	25.84	0.0	0.0	0.0	0.0	0.0	0.0	4.24	212.30	69.29	-	22.80	24.11	21.99	24.85	-	21.50	25.98
17.AUG.91:00:30	APC	25.85	0.0	0.0	0.0	0.0	0.0	0.0	4.30	217.30	68.33	-	23.15	24.08	22.30	25.18	-	21.50	25.98
17.AUG.91:00:45	APC	25.79	0.0	0.0	0.0	0.0	0.0	0.0	4.26	217.40	69.43	-	23.27	23.92	22.20	24.93	-	21.50	25.98
17.AUG.91:01:00	APC	25.70	0.0	0.0	0.0	0.0	0.0	0.0	4.49	219.00	70.20	-	23.15	23.83	22.21	25.09	25.36	21.50	25.98
17.AUG.91:01:15	APC	25.59	0.0	0.0	0.0	0.0	0.0	0.0	4.42	230.20	70.30	-	22.96	23.61	22.12	24.83	-	21.50	25.98
17.AUG.91:01:30	APC	25.44	0.0	0.0	0.0	0.0	0.0	0.0	4.49	237.00	70.60	-	22.74	23.50	22.02	24.71	-	21.50	25.98
17.AUG.91:01:45	APC	25.29	0.0	0.0	0.0	0.0	0.0	0.0	4.32	236.60	70.76	-	22.70	23.32	21.95	24.50	-	21.50	25.98
17.AUG.91:02:00	APC	25.20	0.0	0.0	0.0	0.0	0.0	0.0	4.36	244.70	71.00	-	22.17	23.31	21.69	24.31	-	21.50	25.98

DAY AND TIME OF VISIT COLLECTION SITE	AIR TEMPER- ATURE (Deg. C)	METEOROLOGICAL DATA										RADIOMETRIC DATA									
		SOLAR RADIATION 15-MINS. BEFORE		SOLAR RADIATION BEFORE		SOLAR RADIATION 60-MINS. BEFORE		SOLAR RADIATION 120-MINS. BEFORE		WIND SPEED (M/S)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK- GROUND DIRT		BACK- GROUND DIRT		BACK- GROUND DIRT		BACK- GROUND DIRT		
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)				(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)
17 JUL 91:02:15	APC	25.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.65	245.00	71.70	-	21.99	23.11	21.53	24.12	-	-		
17 JUL 91:02:30	APC	26.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.75	254.00	72.00	-	22.04	23.11	21.45	24.28	-	-		
17 JUL 91:02:45	APC	26.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.72	243.20	70.80	-	21.46	22.91	21.23	24.10	-	-		
17 JUL 91:03:00	APC	26.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.63	248.10	70.20	-	21.57	22.72	21.03	23.97	24.61	-		
17 JUL 91:03:15	APC	26.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.95	242.20	69.29	-	21.68	22.70	20.94	23.96	-	-		
17 JUL 91:03:30	APC	26.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.53	247.50	71.00	-	21.26	22.59	20.81	23.79	-	-		
17 JUL 91:03:45	APC	26.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.63	243.40	72.20	-	21.81	22.33	20.28	23.16	-	-		
17 JUL 91:04:00	APC	26.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.23	245.50	72.00	-	21.16	22.36	20.31	23.23	-	-		
17 JUL 91:04:15	APC	26.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.89	236.50	73.40	-	21.36	22.36	20.42	23.35	-	-		
17 JUL 91:04:30	APC	25.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.58	254.50	74.80	-	21.24	22.17	20.44	23.27	-	-		
17 JUL 91:04:45	APC	25.72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.54	235.00	75.80	-	20.69	22.09	20.18	22.98	-	-		
17 JUL 91:05:00	APC	25.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.39	242.20	77.90	-	20.49	21.92	20.00	22.65	25.95	-		
17 JUL 91:05:15	APC	25.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.49	235.10	80.00	-	20.28	21.93	20.01	22.72	-	-		
17 JUL 91:05:30	APC	25.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.84	249.00	82.50	-	20.09	21.75	19.43	22.41	-	-		
17 JUL 91:05:45	APC	25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.19	252.00	83.60	-	19.98	21.67	19.43	22.33	-	-		
17 JUL 91:06:00	APC	22.99	3.1	0.2	0.0	0.0	0.0	0.0	0.0	3.23	246.00	83.50	-	20.21	21.62	19.65	22.45	-	-		
17 JUL 91:06:15	APC	22.80	15.3	3.1	0.2	0.0	0.0	0.0	0.0	15.3	246.00	86.20	-	19.77	21.53	19.63	22.39	-	-		
17 JUL 91:06:30	APC	23.02	52.7	15.3	3.1	0.0	0.0	0.0	0.0	52.7	238.50	86.60	-	19.84	21.58	19.77	22.29	-	-		
17 JUL 91:06:45	APC	23.33	94.5	52.7	15.3	0.0	0.0	0.0	0.0	94.5	235.50	85.40	-	20.73	21.59	20.18	22.51	-	-		
17 JUL 91:07:00	APC	23.57	142.7	94.5	52.7	3.1	0.0	0.0	0.0	139.6	259.70	85.00	-	21.48	21.79	20.36	22.44	23.92	-		
17 JUL 91:07:15	APC	23.95	193.9	142.7	94.5	0.0	0.0	0.0	0.0	170.6	259.80	84.70	-	21.96	21.91	20.83	22.60	-	-		
17 JUL 91:07:30	APC	26.48	234.0	193.9	142.7	0.0	0.0	0.0	0.0	196.6	261.80	84.20	-	22.39	22.87	21.26	22.91	-	-		
17 JUL 91:07:45	APC	26.78	344.2	291.1	234.0	142.7	15.3	203.5	3.38	233.40	82.60	-	-	22.60	22.31	22.32	23.67	-	-		
17 JUL 91:08:00	APC	25.13	391.7	344.2	291.1	193.9	52.7	197.8	3.13	245.70	81.50	-	-	-	-	-	-	-	-		
17 JUL 91:08:15	APC	25.52	443.1	391.7	344.2	234.0	94.5	209.1	3.05	245.70	79.10	-	-	-	-	-	-	-	-		
17 JUL 91:08:30	APC	35.60	240.9	443.1	391.7	142.7	-50.2	234.40	45.64	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:08:45	APC	34.23	665.3	443.1	344.2	193.9	319.1	206.00	51.61	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:09:00	APC	34.29	715.8	665.3	391.7	234.0	323.3	232.70	51.84	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:09:15	APC	34.85	446.1	715.8	665.3	443.1	291.1	252.70	52.28	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:09:30	APC	34.99	632.2	446.1	715.8	240.9	346.2	252.70	52.85	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:09:45	APC	34.20	606.8	632.2	446.1	665.3	391.7	260.00	52.68	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:10:00	APC	34.65	785.0	686.8	632.2	715.0	443.1	264.40	52.82	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:10:15	APC	34.65	785.0	686.8	632.2	715.0	443.1	264.40	52.82	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:10:30	APC	34.61	779.0	785.0	686.8	446.1	260.9	289.70	52.82	-	-	-	-	-	-	-	-	-	-		
17 JUL 91:10:45	APC	34.61	779.0	785.0	686.8	446.1	260.9	289.70	52.82	-	-	-	-	-	-	-	-	-	-		

METEOROLOGICAL DATA										RADIOMETRIC DATA										
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (DEG. C)	SOLAR RADIATION BEFORE (W/M ²)	SOLAR RADIATION 15-MINS. BEFORE (W/M ²)	SOLAR RADIATION 30-MINS. BEFORE (W/M ²)	SOLAR RADIATION 45-MINS. BEFORE (W/M ²)	SOLAR RADIATION 60-MINS. BEFORE (W/M ²)	SOLAR RADIATION 75-MINS. BEFORE (W/M ²)	SOLAR RADIATION 90-MINS. BEFORE (W/M ²)	SOLAR RADIATION 105-MINS. BEFORE (W/M ²)	WIND DIRECTION (DEGREES)	WIND SPEED (M/S)	RELATIVE HUMIDITY (PERCENT)	BACK-							
													GROUND	GRASS	ROCK	SOIL	GROUND	GROUND	GROUND	WATER
													(DEG. C)	(DEG. C)	(DEG. C)	(DEG. C)	(DEG. C)	(DEG. C)	(DEG. C)	(DEG. C)
20 JUL 91: 10:00	29.83	653.2	609.5	540.9	476.6	315.9	176.6	1.39	7.49	82.40	31.09	33.76	35.24	33.36	30.53	-	-	-	-	-
20 JUL 91: 10:15	30.37	688.4	653.2	609.5	546.9	375.4	171.5	1.26	355.90	88.18	31.49	34.39	36.18	34.42	31.51	-	-	-	-	-
20 JUL 91: 10:30	31.10	722.0	688.4	653.2	589.9	425.7	161.1	2.30	17.57	76.80	31.76	35.00	36.39	34.18	31.74	-	-	-	-	-
20 JUL 91: 10:45	31.35	744.8	722.0	688.4	609.5	476.6	154.5	1.87	62.36	70.10	31.53	35.13	36.10	34.79	32.07	-	-	-	-	-
20 JUL 91: 11:00	31.75	777.0	744.8	722.0	653.2	516.9	125.8	1.86	77.40	67.09	32.27	36.81	36.96	35.61	32.45	-	-	-	-	-
20 JUL 91: 11:15	31.81	799.8	777.0	744.8	688.4	569.9	110.6	1.75	42.45	67.06	32.15	36.86	37.68	35.88	32.61	-	-	-	-	-
20 JUL 91: 11:30	32.13	826.0	799.8	777.0	722.0	609.5	102.0	2.11	55.91	62.19	33.35	38.29	38.69	36.97	33.27	-	-	-	-	-
20 JUL 91: 11:45	32.31	843.8	826.0	799.8	744.8	653.2	104.8	1.78	58.08	66.81	33.51	39.37	39.26	38.49	33.88	-	-	-	-	-
20 JUL 91: 12:00	32.79	878.0	843.8	826.0	777.0	688.4	101.0	1.25	186.70	64.57	34.18	40.73	40.69	38.95	34.56	-	-	-	-	-
20 JUL 91: 12:15	33.52	882.0	878.0	843.8	799.8	722.0	83.0	1.46	56.70	61.32	34.78	41.17	40.50	40.41	34.66	-	-	-	-	-
20 JUL 91: 12:30	33.92	898.0	882.0	878.0	826.0	744.8	74.0	1.01	136.40	58.23	34.52	41.07	41.07	41.35	34.70	-	-	-	-	-
20 JUL 91: 12:45	34.15	874.0	898.0	882.0	843.8	777.0	26.0	0.63	69.37	56.58	34.53	41.44	41.43	42.03	34.48	-	-	-	-	-
20 JUL 91: 13:00	34.21	891.0	874.0	898.0	878.0	799.8	13.0	1.21	81.10	54.89	35.78	42.89	42.89	42.67	35.20	-	-	-	-	-
20 JUL 91: 13:15	34.83	899.0	891.0	874.0	882.0	826.0	17.0	1.04	173.30	51.92	35.51	43.17	42.57	44.11	36.18	-	-	-	-	-
20 JUL 91: 13:30	35.23	910.8	899.0	891.0	898.0	843.8	12.0	0.73	145.20	49.22	35.70	43.33	41.72	44.37	35.53	-	-	-	-	-
20 JUL 91: 13:45	35.14	884.0	910.8	899.0	874.0	878.0	10.0	1.80	128.10	47.78	35.77	42.44	42.44	45.11	35.64	-	-	-	-	-
20 JUL 91: 14:00	35.15	872.0	884.0	910.8	891.0	882.0	-19.0	1.68	26.97	47.72	36.25	43.58	42.97	45.61	36.34	-	-	-	-	-
20 JUL 91: 14:15	35.26	853.0	872.0	884.0	899.0	898.0	-36.0	1.15	94.80	46.59	36.18	43.31	42.90	45.52	36.31	-	-	-	-	-
20 JUL 91: 14:30	35.80	831.0	853.0	872.0	891.0	874.0	-79.0	1.46	151.20	44.60	36.87	42.81	42.28	45.37	36.11	-	-	-	-	-
20 JUL 91: 14:45	35.81	788.0	831.0	853.0	884.0	891.0	-96.0	1.69	163.70	44.76	36.17	43.04	42.05	45.71	35.92	-	-	-	-	-
20 JUL 91: 15:00	35.85	808.0	788.0	831.0	872.0	899.0	-64.0	1.68	197.80	43.92	36.73	42.78	42.33	46.20	36.18	-	-	-	-	-
20 JUL 91: 15:15	36.36	748.0	808.0	831.0	863.0	918.0	-115.0	1.28	211.80	42.47	36.35	42.44	42.11	44.48	36.61	-	-	-	-	-
20 JUL 91: 15:30	36.21	751.0	748.0	808.0	831.0	884.0	-90.0	1.17	144.70	41.83	36.25	42.44	42.44	45.47	37.05	-	-	-	-	-
20 JUL 91: 15:45	36.41	687.7	751.0	748.0	788.0	872.0	-100.3	1.28	148.70	41.19	36.10	41.23	40.92	45.37	36.21	-	-	-	-	-
20 JUL 91: 16:00	36.17	637.2	687.7	751.0	808.0	863.0	-170.8	1.07	128.70	39.62	35.76	40.63	40.64	44.75	36.08	-	-	-	-	-
20 JUL 91: 16:15	36.28	630.5	637.2	687.7	748.0	831.0	-117.5	1.57	146.60	37.52	36.88	41.22	40.54	45.00	36.20	-	-	-	-	-
20 JUL 91: 16:30	36.56	566.8	630.5	637.2	687.7	788.0	-174.2	0.36	81.00	37.25	36.11	39.79	40.23	44.33	36.58	-	-	-	-	-
20 JUL 91: 16:45	36.35	527.6	566.8	630.5	687.7	808.0	-160.1	1.20	140.60	38.23	35.57	38.88	39.29	42.43	35.72	-	-	-	-	-
20 JUL 91: 17:00	36.06	486.1	527.6	566.8	637.2	748.0	-151.1	1.34	105.30	38.83	35.94	39.35	39.51	42.69	36.03	-	-	-	-	-
20 JUL 91: 17:15	36.11	454.5	486.1	527.6	630.5	748.0	-176.0	1.14	148.20	39.16	35.36	38.55	38.89	42.28	35.83	-	-	-	-	-
20 JUL 91: 17:30	36.23	422.2	454.5	486.1	566.8	687.7	-144.6	0.69	124.20	38.00	35.28	38.35	38.68	41.98	36.02	-	-	-	-	-
20 JUL 91: 17:45	36.05	357.6	422.2	454.5	527.6	637.2	-170.0	1.07	162.90	39.08	34.66	37.27	37.86	41.18	35.42	-	-	-	-	-
20 JUL 91: 18:00	35.28	281.7	357.6	422.2	486.1	630.5	-206.4	2.74	202.30	45.25	33.88	35.76	36.85	39.88	34.75	-	-	-	-	-
20 JUL 91: 18:15	33.08	222.8	281.7	357.6	454.5	566.8	-231.7	3.16	216.30	50.94	31.00	32.03	34.56	36.36	32.35	-	-	-	-	-

[illegible]

METEOROLOGICAL DATA										RADIOMETRIC DATA										
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION			SOLAR RADIATION			1-M. DIFFERENCE (U/M ²)	RELATIVE HUMIDITY (PERCENT)	WIND DIRECTION (DEGREES)	WIND SPEED (MILES) (DEGREES)	BACK-SCATTER			BACK-SCATTER			BACK-SCATTER		
		15-MILES. BEFORE	30-MILES. BEFORE	45-MILES. BEFORE	60-MILES. BEFORE	75-MILES. BEFORE	90-MILES. BEFORE					WIND DIRECTION (DEGREES)	WIND SPEED (MILES) (DEGREES)	WIND DIRECTION (DEGREES)	WIND SPEED (MILES) (DEGREES)	WIND DIRECTION (DEGREES)	WIND SPEED (MILES) (DEGREES)	WIND DIRECTION (DEGREES)	WIND SPEED (MILES) (DEGREES)	WIND DIRECTION (DEGREES)
0900591:23:45	EEL	25.67	0.0	0.0	0.0	0.0	0.0	0.0	1.44	248.20	92.40	24.35	24.00	24.66	24.41	-	-	-	-	
1000591:00:00	EEL	25.70	0.0	0.0	0.0	0.0	0.0	0.0	1.37	244.70	92.20	24.23	24.00	24.55	24.36	-	-	-	-	
1000591:00:15	EEL	25.58	0.0	0.0	0.0	0.0	0.0	0.0	1.16	257.90	92.30	24.11	23.83	24.41	24.21	-	-	-	-	
1000591:00:30	EEL	25.57	0.0	0.0	0.0	0.0	0.0	0.0	1.42	252.30	92.40	24.34	24.83	24.49	24.43	-	-	-	-	
1000591:00:45	EEL	25.60	0.0	0.0	0.0	0.0	0.0	0.0	1.63	244.90	92.30	24.47	24.13	24.47	24.52	-	-	-	-	
1000591:01:00	EEL	25.54	0.0	0.0	0.0	0.0	0.0	0.0	1.35	249.20	92.30	24.12	23.77	24.28	24.16	-	-	-	-	
1000591:01:15	EEL	25.44	0.0	0.0	0.0	0.0	0.0	0.0	1.37	271.70	92.40	23.94	23.62	24.15	23.96	-	-	-	-	
1000591:01:30	EEL	25.44	0.0	0.0	0.0	0.0	0.0	0.0	1.81	261.90	92.10	24.51	24.25	24.45	24.40	-	-	-	-	
1000591:01:45	EEL	25.72	0.0	0.0	0.0	0.0	0.0	0.0	1.08	255.30	92.00	24.68	24.34	24.58	24.76	-	-	-	-	
1000591:02:00	EEL	25.82	0.0	0.0	0.0	0.0	0.0	0.0	2.16	243.90	92.00	24.70	24.45	24.53	24.76	-	-	-	-	
1000591:02:15	EEL	25.95	0.0	0.0	0.0	0.0	0.0	0.0	2.50	256.20	91.60	23.83	24.57	24.63	25.08	-	-	-	-	
1000591:02:30	EEL	26.12	0.0	0.0	0.0	0.0	0.0	0.0	3.02	247.40	90.60	23.18	24.43	24.50	25.24	-	-	-	-	
1000591:02:45	EEL	25.93	0.0	0.0	0.0	0.0	0.0	0.0	2.37	258.80	90.50	24.05	24.12	24.21	24.84	-	-	-	-	
1000591:03:00	EEL	25.74	0.0	0.0	0.0	0.0	0.0	0.0	1.98	261.20	91.30	24.68	24.26	24.27	24.76	-	-	-	-	
1000591:03:15	EEL	25.50	0.0	0.0	0.0	0.0	0.0	0.0	2.30	244.20	91.30	24.68	24.26	24.45	24.71	-	-	-	-	
1000591:03:30	EEL	25.65	0.0	0.0	0.0	0.0	0.0	0.0	2.12	250.60	91.70	24.42	24.05	24.17	24.44	-	-	-	-	
1000591:03:45	EEL	25.64	0.0	0.0	0.0	0.0	0.0	0.0	1.70	246.40	92.00	24.42	24.05	24.16	24.49	-	-	-	-	
1000591:04:00	EEL	25.49	0.0	0.0	0.0	0.0	0.0	0.0	1.72	257.10	92.00	24.39	24.05	24.16	24.49	-	-	-	-	
1000591:04:15	EEL	25.54	0.0	0.0	0.0	0.0	0.0	0.0	1.61	256.40	92.20	24.14	23.87	23.98	24.25	-	-	-	-	
1000591:04:30	EEL	25.46	0.0	0.0	0.0	0.0	0.0	0.0	1.52	213.50	92.70	23.76	23.63	23.80	23.84	-	-	-	-	
1000591:04:45	EEL	25.01	0.0	0.0	0.0	0.0	0.0	0.0	1.38	265.20	93.30	23.91	23.73	23.97	23.96	-	-	-	-	
1000591:05:00	EEL	25.32	0.0	0.0	0.0	0.0	0.0	0.0	1.21	279.40	93.20	24.21	24.03	24.24	24.26	-	-	-	-	
1000591:05:15	EEL	25.20	0.0	0.0	0.0	0.0	0.0	0.0	0.72	315.40	93.00	24.13	24.03	24.30	24.19	-	-	-	-	
1000591:05:30	EEL	25.23	0.0	0.0	0.0	0.0	0.0	0.0	0.91	257.40	93.00	23.79	23.45	23.86	23.86	-	-	-	-	
1000591:05:45	EEL	24.98	0.2	0.0	0.0	0.0	0.0	0.0	1.05	263.50	93.10	23.64	23.33	23.78	23.73	-	-	-	-	
1000591:06:00	EEL	24.94	0.2	0.0	0.0	0.0	0.0	0.0	0.75	277.00	93.40	23.75	23.48	23.84	23.91	-	-	-	-	
1000591:06:15	EEL	25.02	20.3	6.4	0.2	0.0	0.0	0.0	0.83	316.40	93.20	24.35	23.74	24.45	24.52	-	-	-	-	
1000591:06:30	EEL	25.32	41.1	20.3	6.4	0.0	0.0	0.0	1.17	325.20	92.40	25.05	25.00	24.76	25.18	-	-	-	-	
1000591:06:45	EEL	25.77	58.9	41.1	20.3	0.2	0.0	0.0	1.78	333.30	91.70	25.78	25.56	25.19	25.94	-	-	-	-	
1000591:07:00	EEL	26.14	117.1	58.9	41.1	6.4	0.0	0.0	1.84	332.50	90.80	27.22	26.87	26.56	27.52	-	-	-	-	
1000591:07:30	EEL	26.80	237.0	117.1	58.9	20.3	0.0	0.0	1.25	266.80	89.50	28.15	27.87	27.44	28.43	-	-	-	-	
1000591:07:45	EEL	27.70	293.1	237.0	117.1	41.1	0.2	0.0	1.80	311.10	88.40	28.49	28.41	27.89	28.66	-	-	-	-	
1000591:08:00	EEL	28.27	364.7	293.1	237.0	58.9	6.4	0.0	1.80	311.10	88.40	28.49	28.41	27.89	28.66	-	-	-	-	

DAY AND TIME OF VISITS COLLECTION SITE	AIR TEMPERATURE (Deg. C)	METEOROLOGICAL DATA					RADIOMETRIC DATA									
		SOLAR RADIATION		SOLAR RADIATION		WIND (MPS)	WIND DIRECTION (DEGREES)	RELATIVE HUMIDITY (PERCENT)	BACK-SCATTERED		BACK-SCATTERED		BACK-SCATTERED		BACK-SCATTERED	
		15-MINS. BEFORE	BEFORE	60-MINS. BEFORE	120-MINS. BEFORE				GROUND SURF	DIRT ROAD	GROUND SURF	DIRT ROAD	GROUND SURF	DIRT ROAD	GROUND SURF	DIRT ROAD
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)				(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)
10MUS91:08:15	EEL	28.74	390.3	364.7	295.1	117.1	20.3	273.2	1.93	281.50	87.50	28.89	29.03	29.08	29.06	-
10MUS91:08:30	EEL	29.15	451.0	390.3	364.7	237.8	41.1	214.8	2.01	294.00	86.40	29.28	29.07	29.61	29.32	-
10MUS91:08:45	EEL	29.48	428.5	451.0	390.3	297.1	58.9	131.4	1.63	273.80	85.20	29.37	30.47	30.10	29.58	-
10MUS91:09:00	EEL	29.51	422.3	426.5	451.8	366.7	117.1	57.6	2.34	271.80	84.80	29.16	30.62	30.10	29.14	-
10MUS91:09:15	EEL	29.67	432.9	422.3	426.5	398.3	237.8	42.6	1.79	294.00	84.70	29.51	31.54	30.72	29.60	-
10MUS91:09:30	EEL	29.71	356.2	432.9	422.3	451.8	293.1	84.8	1.92	300.30	84.70	28.90	30.57	30.07	28.87	-
10MUS91:09:45	EEL	29.71	426.1	356.2	432.9	426.5	366.7	1.6	1.89	318.30	84.60	29.43	32.04	31.63	29.70	-
10MUS91:10:00	EEL	30.19	612.1	426.1	356.2	390.3	189.8	189.8	1.85	294.50	83.40	30.64	33.27	33.58	30.83	-
10MUS91:10:15	EEL	30.44	526.1	612.1	426.1	451.8	93.2	93.2	2.16	324.40	82.40	30.60	34.24	33.59	31.15	-
10MUS91:10:30	EEL	30.57	552.3	526.1	612.1	356.2	426.5	196.1	2.31	309.40	81.30	31.15	35.23	34.46	31.47	-
10MUS91:10:45	EEL	31.04	765.8	552.3	526.1	426.1	422.3	318.9	1.85	285.00	78.70	31.79	35.87	32.55	29.94	-
10MUS91:11:00	EEL	30.99	748.8	765.8	552.3	612.1	432.9	170.5	3.44	334.30	77.20	30.03	32.81	32.55	29.94	-
10MUS91:11:15	EEL	31.63	843.0	641.6	745.0	526.1	356.2	316.9	2.73	323.10	74.30	32.88	38.13	36.51	33.41	-
10MUS91:11:30	EEL	32.09	748.8	843.0	641.6	552.3	426.1	195.7	2.29	266.40	70.70	32.07	37.28	36.39	32.63	-
10MUS91:11:45	EEL	32.06	535.5	748.8	843.0	745.0	612.1	209.5	1.90	312.10	68.40	31.21	34.85	35.40	31.60	-
10MUS91:12:00	EEL	31.91	632.2	535.5	748.8	441.6	526.1	190.6	3.66	332.70	68.42	31.20	34.67	35.01	31.12	-
10MUS91:12:15	EEL	32.38	689.2	632.2	535.5	843.0	552.3	153.8	2.49	333.10	67.33	32.20	36.91	37.31	32.50	-
10MUS91:12:30	EEL	32.38	584.1	689.2	632.2	748.8	745.0	163.9	2.71	266.70	64.43	31.43	35.93	35.22	31.80	-
10MUS91:12:45	EEL	32.34	573.1	584.1	689.2	535.5	441.6	37.6	2.84	289.70	63.97	31.52	35.89	35.94	31.91	-
10MUS91:13:00	EEL	32.76	709.0	573.1	584.1	632.2	843.0	76.8	2.08	277.80	63.63	32.81	38.31	38.11	33.50	-
10MUS91:13:15	EEL	33.12	696.1	709.0	573.1	689.2	748.8	6.9	2.50	254.60	61.61	32.48	37.61	37.73	33.06	-
10MUS91:13:30	EEL	33.16	644.8	696.1	709.0	584.1	535.5	60.7	2.08	285.10	60.42	32.30	37.11	37.36	32.97	-
10MUS91:13:45	EEL	33.36	754.0	644.8	696.1	573.1	632.2	180.9	3.18	253.10	61.46	32.78	38.42	38.21	33.35	-
10MUS91:14:00	EEL	33.53	845.0	754.0	644.8	709.0	689.2	134.0	3.52	251.30	60.28	33.30	39.34	38.79	33.95	-
10MUS91:14:15	EEL	33.72	863.0	845.0	754.0	696.1	584.1	166.9	3.53	254.10	59.49	33.05	39.43	39.49	33.91	-
10MUS91:14:30	EEL	33.68	783.0	863.0	845.0	644.8	573.1	138.2	3.44	236.00	60.48	33.41	39.02	39.16	33.97	-
10MUS91:14:45	EEL	33.53	607.4	783.0	845.0	709.0	689.2	144.6	3.37	219.10	62.77	32.59	38.14	37.98	32.82	-
10MUS91:15:00	EEL	33.02	509.6	607.4	783.0	845.0	696.1	335.4	3.76	227.80	66.08	31.44	35.97	35.89	31.65	-
10MUS91:15:15	EEL	32.57	488.7	509.6	607.4	863.0	573.1	374.3	3.26	227.90	67.53	31.30	35.89	36.41	31.65	-
10MUS91:15:30	EEL	32.25	482.1	488.7	509.6	783.0	754.0	300.9	4.22	212.70	68.26	30.91	34.89	35.21	31.13	-
10MUS91:15:45	EEL	32.10	512.4	482.1	488.7	607.4	845.0	95.0	4.09	230.30	70.00	31.41	35.99	36.29	31.68	-
10MUS91:16:00	EEL	32.29	583.4	512.4	482.1	509.6	863.0	73.8	4.16	225.60	69.71	31.92	36.57	36.90	32.71	-
10MUS91:16:15	EEL	32.25	440.5	583.4	512.4	488.7	783.0	48.2	4.22	234.50	69.43	31.56	35.79	36.06	32.16	-
10MUS91:16:30	EEL	30.10	75.0	440.5	583.4	482.1	607.4	407.1	2.66	267.20	65.07	26.96	28.38	29.06	26.61	-

DATE AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (DEG. C)	METEOROLOGICAL DATA										RADIOMETRIC DATA									
		SOLAR RADIATION					SOLAR RADIATION					SOLAR RADIATION					SOLAR RADIATION				
		15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	60-MINS. BEFORE	75-MINS. BEFORE	15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	60-MINS. BEFORE	75-MINS. BEFORE	15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	60-MINS. BEFORE	75-MINS. BEFORE	15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	60-MINS. BEFORE	75-MINS. BEFORE
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)
10AUG91:16:45	EGL	28.58	162.5	75.0	440.5	512.4	509.6	-349.9	1.15	310.50	64.76	27.07	29.59	-	30.73	27.22	-	-	-	-	-
10AUG91:17:00	EGL	28.65	166.7	162.5	75.0	583.4	488.7	-416.7	0.92	231.10	67.10	27.02	29.96	-	30.96	27.55	-	-	-	-	-
10AUG91:17:15	EGL	28.63	166.1	166.7	162.5	440.5	482.1	-274.4	0.89	207.00	70.50	27.09	29.76	-	30.64	27.59	-	-	-	-	-
10AUG91:17:30	EGL	28.87	144.0	166.1	166.7	75.0	512.4	69.0	1.72	200.80	72.20	27.54	29.69	-	30.56	27.95	-	-	-	-	-
10AUG91:17:45	EGL	29.14	124.4	144.0	166.1	162.5	583.4	-58.1	2.36	227.00	76.40	28.13	29.64	-	30.41	28.48	-	-	-	-	-
10AUG91:18:00	EGL	29.39	108.2	124.4	144.0	166.7	440.5	-58.5	3.10	223.20	81.00	28.48	29.77	-	30.09	28.75	-	-	-	-	-
10AUG91:18:15	EGL	29.33	88.4	108.2	124.4	166.1	75.0	-77.7	2.89	230.20	81.90	28.30	29.26	-	29.6	28.51	-	-	-	-	-
10AUG91:18:30	EGL	29.17	67.9	88.4	108.2	144.0	162.5	-76.1	2.93	231.80	82.70	28.12	28.94	-	29.33	28.30	-	-	-	-	-
10AUG91:18:45	EGL	28.95	45.8	67.9	88.4	124.4	166.7	-78.6	3.28	239.40	83.50	27.90	28.40	-	28.75	28.01	-	-	-	-	-
10AUG91:19:00	EGL	28.75	26.5	45.8	67.9	108.2	166.1	-81.7	2.86	241.90	85.10	27.73	28.04	-	28.55	27.82	-	-	-	-	-
10AUG91:19:15	EGL	28.48	16.0	26.5	45.8	88.4	144.0	-72.4	3.06	226.00	87.00	27.46	27.50	-	28.02	27.53	-	-	-	-	-
10AUG91:19:30	EGL	28.26	4.4	16.0	26.5	67.9	124.4	-63.5	3.21	246.90	88.90	27.26	27.23	-	27.64	27.28	-	-	-	-	-
10AUG91:19:45	EGL	28.06	0.2	4.4	16.0	45.8	108.2	-45.6	2.60	235.30	88.90	27.00	26.96	-	27.54	27.04	-	-	-	-	-
10AUG91:20:00	EGL	27.80	0.0	0.2	4.4	26.5	88.4	-28.5	2.26	234.90	89.70	26.80	26.78	-	27.33	26.84	-	-	-	-	-
10AUG91:20:15	EGL	27.83	0.0	0.0	0.2	16.0	67.9	-16.0	2.47	261.30	90.10	26.93	26.77	-	27.32	26.96	-	-	-	-	-
10AUG91:20:30	EGL	27.84	0.0	0.0	0.0	4.4	45.8	-4.4	2.04	267.10	90.10	26.87	26.67	-	27.22	26.84	-	-	-	-	-
10AUG91:20:45	EGL	27.76	0.0	0.0	0.0	0.2	26.5	-0.2	1.97	267.50	90.10	26.78	26.40	-	27.12	26.74	-	-	-	-	-
10AUG91:21:00	EGL	27.77	0.0	0.0	0.0	0.0	16.0	0.0	2.43	266.60	89.70	26.79	26.48	-	27.06	26.73	-	-	-	-	-
10AUG91:21:15	EGL	27.73	0.0	0.0	0.0	0.0	4.4	0.0	2.05	273.80	89.70	26.60	26.25	-	26.83	26.55	-	-	-	-	-
10AUG91:21:30	EGL	27.64	0.0	0.0	0.0	0.0	0.2	0.0	1.47	269.60	89.60	26.31	26.01	-	26.57	26.23	-	-	-	-	-
10AUG91:21:45	EGL	27.50	0.0	0.0	0.0	0.0	0.0	0.0	1.37	277.90	89.80	25.97	25.57	-	26.28	25.86	-	-	-	-	-
10AUG91:22:00	EGL	27.33	0.0	0.0	0.0	0.0	0.0	0.0	1.35	273.80	89.90	25.81	25.23	-	26.02	25.68	-	-	-	-	-
10AUG91:22:15	EGL	26.99	0.0	0.0	0.0	0.0	0.0	0.0	1.29	265.10	90.40	25.42	25.16	-	25.78	25.49	-	-	-	-	-
10AUG91:22:30	EGL	26.57	0.0	0.0	0.0	0.0	0.0	0.0	1.12	263.10	91.20	24.93	24.79	-	25.53	25.01	-	-	-	-	-
10AUG91:22:45	EGL	26.31	0.0	0.0	0.0	0.0	0.0	0.0	1.08	256.90	91.80	24.73	24.51	-	25.36	24.80	-	-	-	-	-
10AUG91:23:00	EGL	26.05	0.0	0.0	0.0	0.0	0.0	0.0	1.20	242.00	92.20	24.44	24.36	-	25.19	24.52	-	-	-	-	-
10AUG91:23:15	EGL	25.85	0.0	0.0	0.0	0.0	0.0	0.0	1.41	244.60	92.70	24.50	24.36	-	25.13	24.56	-	-	-	-	-
10AUG91:23:30	EGL	25.80	0.0	0.0	0.0	0.0	0.0	0.0	1.54	244.40	93.00	24.60	24.51	-	25.16	24.73	-	-	-	-	-
10AUG91:23:45	EGL	25.73	0.0	0.0	0.0	0.0	0.0	0.0	1.20	247.30	93.00	24.42	24.25	-	24.99	24.51	-	-	-	-	-
10AUG91:00:00	EGL	25.58	0.0	0.0	0.0	0.0	0.0	0.0	1.26	250.70	93.10	24.26	24.08	-	24.86	24.37	-	-	-	-	-
11AUG91:00:15	EGL	25.54	0.0	0.0	0.0	0.0	0.0	0.0	1.01	288.10	93.30	24.30	24.14	-	24.89	24.38	-	-	-	-	-
11AUG91:00:30	EGL	25.51	0.0	0.0	0.0	0.0	0.0	0.0	1.05	282.30	93.30	24.27	24.05	-	25.12	24.40	-	-	-	-	-
11AUG91:00:45	EGL	25.51	0.0	0.0	0.0	0.0	0.0	0.0	0.76	271.10	93.30	24.37	24.42	-	25.12	24.45	-	-	-	-	-
11AUG91:01:00	EGL	25.32	0.0	0.0	0.0	0.0	0.0	0.0	0.42	346.20	93.40	23.84	23.53	-	24.48	23.96	-	-	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA										
DAY AND TIME OF VISITED COLLECTION SITE	AIR TEMPERATURE (Deg. C)	SOLAR RADIATION			SOLAR RADIATION			SOLAR RADIATION			RELATIVE HUMIDITY			BACK-SCATTERED			BACK-SCATTERED			
		15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	120-MINS. BEFORE	120-MINS. BEFORE	120-MINS. BEFORE	120-MINS. BEFORE	120-MINS. BEFORE	120-MINS. BEFORE	PERCENT	PERCENT	PERCENT	DIRT ROAD	DIRT ROAD	DIRT ROAD	DIRT ROAD	DIRT ROAD	DIRT ROAD	
		(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	
11AUG91-01:15	ECL	25.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	157.60	93.50	23.75	23.27	-	24.28	23.91	-	
11AUG91-01:30	ECL	24.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	60.60	93.70	23.56	23.51	-	24.41	23.74	-	
11AUG91-01:45	ECL	24.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.70	273.80	93.90	23.92	23.79	-	24.69	24.06	-	
11AUG91-02:00	ECL	25.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	316.70	92.90	24.03	23.78	-	24.51	24.10	-	
11AUG91-02:15	ECL	25.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.55	283.90	93.70	24.19	23.94	-	24.54	24.27	-	
11AUG91-02:30	ECL	25.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.56	266.40	93.50	24.23	24.14	-	24.53	24.32	-	
11AUG91-02:45	ECL	25.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.48	253.60	93.30	24.49	24.84	-	25.29	24.62	-	
11AUG91-03:00	ECL	25.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.79	283.20	93.10	24.37	24.52	-	24.81	24.48	-	
11AUG91-03:15	ECL	25.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.66	252.50	93.00	24.41	24.66	-	24.85	24.53	-	
11AUG91-03:30	ECL	25.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.90	270.40	92.20	24.10	24.01	-	24.29	24.10	-	
11AUG91-03:45	ECL	25.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.98	242.20	91.80	23.85	23.95	-	24.38	23.91	-	
11AUG91-04:00	ECL	24.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.05	211.20	92.00	23.44	23.71	-	24.20	23.56	-	
11AUG91-04:15	ECL	24.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.97	219.40	92.30	23.32	23.48	-	23.83	23.44	-	
11AUG91-04:30	ECL	24.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.22	202.90	92.40	23.26	23.38	-	23.80	23.37	-	
11AUG91-04:45	ECL	24.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.26	216.60	91.80	23.17	23.25	-	23.68	23.24	-	
11AUG91-05:00	ECL	23.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.84	214.70	90.80	22.96	22.90	-	23.45	23.03	-	
11AUG91-05:15	ECL	23.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.77	197.80	91.00	22.80	22.70	-	23.44	22.83	-	
11AUG91-05:30	ECL	23.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	207.10	91.30	22.56	22.70	-	23.44	22.67	-	
11AUG91-05:45	ECL	23.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	207.70	91.50	22.63	22.78	-	23.51	22.70	-	
11AUG91-06:00	ECL	23.89	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	26.10	91.70	22.50	22.91	-	23.60	22.63	-	
11AUG91-06:15	ECL	23.59	5.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.57	19.76	92.60	22.48	23.08	-	23.70	22.62	-	
11AUG91-06:30	ECL	23.53	14.3	5.5	0.7	0.0	0.0	0.0	0.0	0.0	0.66	308.80	92.90	23.12	23.70	-	24.21	23.31	-	
11AUG91-07:00	ECL	23.76	24.8	14.3	5.5	0.0	0.0	0.0	0.0	0.0	0.76	303.40	92.30	23.57	24.04	-	24.50	23.76	-	
11AUG91-07:15	ECL	24.11	39.5	24.8	14.3	0.7	0.0	0.0	0.0	0.0	0.76	303.40	92.30	23.57	24.04	-	24.50	23.76	-	
11AUG91-07:30	ECL	24.34	60.1	39.5	24.8	5.5	0.0	0.0	0.0	0.0	1.03	356.10	92.00	23.95	24.51	-	24.87	24.19	-	
11AUG91-07:45	ECL	24.59	67.7	60.1	39.5	14.3	0.0	0.0	0.0	0.0	1.39	345.80	91.70	24.23	24.86	-	25.14	24.53	-	
11AUG91-08:00	ECL	24.86	89.6	67.7	60.1	24.8	0.7	0.0	0.0	0.0	1.21	347.10	91.30	24.69	25.31	-	25.66	25.01	-	
11AUG91-08:15	ECL	25.19	106.2	89.6	67.7	39.5	5.5	0.0	0.0	0.0	0.98	325.50	91.10	25.07	25.87	-	26.08	25.41	-	
11AUG91-08:30	ECL	25.50	133.6	106.2	89.5	60.1	14.3	0.0	0.0	0.0	1.11	324.40	90.90	25.30	25.94	-	26.04	25.63	-	
11AUG91-08:45	ECL	25.76	178.6	133.6	106.2	6.7	24.8	110.9	2.20	332.20	90.60	25.72	26.65	-	26.87	26.09	-	26.23	27.10	-
11AUG91-09:00	ECL	26.06	244.8	178.6	133.6	89.6	39.5	155.2	1.86	341.10	90.20	26.64	28.06	-	26.87	26.09	-	26.23	27.10	-
11AUG91-09:15	ECL	26.97	506.2	244.8	178.6	106.2	60.1	400.0	1.71	328.30	89.20	28.61	31.38	-	26.87	26.09	-	26.23	27.10	-
11AUG91-09:30	ECL	28.29	504.6	244.8	178.6	133.6	67.7	450.8	0.25	291.60	88.60	28.65	33.48	-	26.87	26.09	-	26.23	27.10	-

DAY AND TIME OF COLLECTION	VISITED SITE	METEOROLOGICAL DATA										RADIOMETRIC DATA									
		AIR					SOLAR					IMR					BACK-				
		TEMPERATURE	SOLAR RADIATION	50-HRS. BEFORE	60-HRS. BEFORE	120-HRS. BEFORE	SOLAR RADIATION	50-HRS. BEFORE	60-HRS. BEFORE	120-HRS. BEFORE	SOLAR RADIATION	SOLAR RADIATION	DIFFERENCE	RELATIVE HUMIDITY	WIND DIRECTION	WIND SPEED	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND	BACK- GROUND
		(Deg. C)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(W/M ²)	(PERCENT)	(DEGREES)	(MPS)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)	(Deg. C)
11AUG91:09:45	EEL	29.64	708.0	584.4	506.2	178.6	89.6	529.4	1.37	249.74	81.59	31.16	35.72	-	-	-	35.14	31.80	-	-	-
11AUG91:10:00	EEL	30.17	699.3	708.0	584.4	244.8	106.2	454.5	1.35	262.90	80.90	30.82	35.81	-	-	-	34.77	31.60	-	-	-
11AUG91:10:15	EEL	31.15	833.0	699.3	708.0	506.2	133.6	326.8	2.05	215.90	75.30	31.38	37.20	-	-	-	34.38	31.64	-	-	-
11AUG91:10:30	EEL	31.42	951.0	633.0	699.3	584.4	178.6	346.6	2.75	252.30	72.10	31.97	38.14	-	-	-	34.83	32.17	-	-	-
11AUG91:10:45	EEL	31.85	795.0	951.0	833.0	708.0	244.8	87.0	1.92	263.06	69.33	31.58	37.08	-	-	-	37.36	31.87	-	-	-
11AUG91:11:00	EEL	30.99	721.0	795.0	951.0	699.3	506.2	21.7	2.62	259.00	70.40	30.42	35.59	-	-	-	34.90	30.91	-	-	-
11AUG91:11:15	EEL	31.66	902.0	721.0	795.0	833.0	584.4	69.0	1.92	260.20	67.71	32.16	38.62	-	-	-	38.74	32.49	-	-	-
11AUG91:11:30	EEL	31.86	702.0	902.0	721.0	951.0	708.0	-249.8	1.26	309.40	65.31	31.48	36.40	-	-	-	37.31	31.70	-	-	-
11AUG91:11:45	EEL	32.38	1111.0	702.0	795.0	699.3	316.0	293.70	63.87	33.33	48.45	-	-	-	-	-	41.73	34.01	-	-	-
11AUG91:12:00	EEL	32.07	733.0	1111.0	702.0	721.0	833.0	12.0	2.56	292.30	63.52	31.70	36.85	-	-	-	38.11	32.03	-	-	-
11AUG91:12:15	EEL	32.06	1014.0	733.0	1111.0	902.0	951.0	112.0	1.36	343.90	64.81	31.60	41.14	-	-	-	41.96	34.30	-	-	-
11AUG91:12:30	EEL	32.28	490.5	1014.0	733.0	702.0	795.0	-211.5	1.85	4.12	64.22	31.88	25.53	-	-	-	38.21	31.53	-	-	-
11AUG91:12:45	EEL	31.49	308.5	490.5	1014.0	1111.0	721.0	-802.5	1.84	341.70	65.48	29.93	32.89	-	-	-	34.42	29.80	-	-	-
11AUG91:13:00	EEL	31.89	663.8	308.5	490.5	733.0	902.0	-69.2	1.63	293.20	63.93	32.25	37.80	-	-	-	38.35	32.95	-	-	-
11AUG91:13:15	EEL	32.53	655.9	663.8	308.5	1014.0	702.0	-358.1	1.97	323.30	61.86	32.57	38.08	-	-	-	39.38	33.31	-	-	-
11AUG91:13:30	EEL	32.71	708.0	655.9	663.8	490.5	1111.0	217.5	2.03	265.30	61.07	32.16	37.38	-	-	-	38.25	32.79	-	-	-
11AUG91:13:45	EEL	32.49	648.5	708.0	655.9	308.5	733.0	340.8	1.76	286.40	60.87	32.20	37.59	-	-	-	38.20	32.74	-	-	-
11AUG91:14:00	EEL	32.92	669.0	648.5	708.0	663.8	1014.0	5.2	2.08	254.10	60.49	33.21	39.06	-	-	-	40.34	33.49	-	-	-
11AUG91:14:15	EEL	32.86	594.9	669.0	648.5	655.9	490.5	-61.8	3.02	248.00	60.54	31.83	34.92	-	-	-	36.01	30.91	-	-	-
11AUG91:14:30	EEL	32.81	619.8	594.9	648.5	708.0	308.5	-88.2	2.22	268.50	60.58	31.75	36.88	-	-	-	38.07	32.35	-	-	-
11AUG91:14:45	EEL	33.39	566.4	619.8	594.9	648.5	663.8	-82.1	1.16	278.60	59.23	32.42	37.64	-	-	-	39.10	33.07	-	-	-
11AUG91:15:00	EEL	32.65	295.9	566.4	619.8	669.8	655.9	-373.1	1.32	297.00	60.95	30.49	33.99	-	-	-	34.70	30.58	-	-	-
11AUG91:15:15	EEL	31.66	291.8	295.9	566.4	594.9	708.0	-303.1	1.07	113.90	62.01	29.45	33.71	-	-	-	34.04	29.49	-	-	-
11AUG91:15:30	EEL	29.58	201.9	291.8	295.9	619.8	648.5	-477.9	2.10	111.50	69.40	27.49	30.90	-	-	-	31.91	27.20	-	-	-
11AUG91:15:45	EEL	29.82	373.6	201.9	291.8	566.4	669.0	-192.8	2.54	136.30	73.50	29.69	34.26	-	-	-	34.93	29.87	-	-	-
11AUG91:16:00	EEL	29.68	129.4	373.6	201.9	295.9	594.9	-166.5	3.10	181.90	75.20	28.14	30.80	-	-	-	31.97	28.23	-	-	-
11AUG91:16:15	EEL	27.00	66.3	329.4	129.4	291.8	619.8	-225.5	4.90	182.90	77.40	24.35	25.87	-	-	-	24.82	24.09	-	-	-
11AUG91:16:30	EEL	24.89	66.3	66.3	329.4	373.6	566.4	-135.6	5.11	174.70	86.20	22.51	23.86	-	-	-	24.86	22.25	-	-	-
11AUG91:16:45	EEL	24.07	24.6	66.3	66.3	373.6	295.9	-349.0	4.44	195.10	95.10	22.44	23.66	-	-	-	24.99	22.30	-	-	-
11AUG91:17:00	EEL	24.09	10.7	24.6	66.3	129.4	291.8	-118.7	3.72	254.70	93.10	22.60	23.73	-	-	-	25.15	22.57	-	-	-
11AUG91:17:15	EEL	23.60	5.4	10.7	24.6	66.3	201.9	-60.9	2.91	262.20	93.20	22.27	22.98	-	-	-	24.52	22.32	-	-	-
11AUG91:17:30	EEL	23.30	7.9	5.4	10.7	66.3	373.6	-58.4	0.95	2.63	93.80	22.43	23.37	-	-	-	25.14	22.55	-	-	-
11AUG91:17:45	EEL	23.34	10.2	7.9	5.4	24.6	129.4	-14.3	1.53	3.63	94.40	22.72	23.82	-	-	-	25.40	22.85	-	-	-
11AUG91:18:00	EEL	23.47	10.3	10.2	7.9	10.7	66.3	-0.3	0.83	8.97	94.50	22.86	24.03	-	-	-	25.60	22.96	-	-	-

METEOROLOGICAL DATA										RADIOMETRIC DATA										
DAY AND TIME OF VISIT COLLECTION SITE	AIR TEMPERATURE (DEG. C)	SOLAR RADIATION				DIFFERENCE SOLAR-RADIATION (W/M ²)	WIND DIRECTION (DEGREES)	WIND SPEED (MPH)	RELATIVE HUMIDITY (PERCENT)	BACK-SCATTER					BACK-SCATTER					
		15-MINS. BEFORE	30-MINS. BEFORE	45-MINS. BEFORE	60-MINS. BEFORE					120-MINS. BEFORE	180-MINS. BEFORE	240-MINS. BEFORE	300-MINS. BEFORE	GROUND DIRT	GROUND ROAD	GROUND SOIL	GROUND TREE	GROUND WATER		
11AUG91:18:15 EEL	23.66	7.2	10.3	10.2	5.6	66.3	1.8	0.11	187.70	94.50	23.09	24.39	-	25.72	23.24	-	-	-	-	-
11AUG91:19:30 EEL	23.80	4.3	7.2	10.3	7.9	26.6	-3.7	0.89	28.44	94.40	23.20	24.42	-	25.68	23.35	-	-	-	-	-
11AUG91:19:45 EEL	23.76	1.4	4.3	7.2	10.2	10.7	-8.9	1.56	21.87	94.40	23.06	24.32	-	25.38	23.20	-	-	-	-	-
11AUG91:19:50 EEL	23.87	0.4	1.4	4.3	10.3	5.4	-9.9	1.08	353.70	94.30	23.27	24.48	-	25.51	23.44	-	-	-	-	-
11AUG91:19:55 EEL	23.96	0.0	0.4	1.4	7.2	7.9	-7.2	2.27	349.20	94.30	23.25	24.39	-	25.18	23.37	-	-	-	-	-
11AUG91:19:59 EEL	23.82	0.0	0.0	0.4	4.3	10.2	-4.3	2.76	349.00	93.90	22.87	23.89	-	26.78	22.93	-	-	-	-	-
11AUG91:19:45 EEL	23.46	0.0	0.0	0.0	1.4	10.3	-1.4	4.38	337.60	93.50	22.23	23.25	-	23.84	22.27	-	-	-	-	-
11AUG91:20:00 EEL	22.91	0.0	0.0	0.0	0.0	7.2	-0.4	4.46	335.00	93.50	21.80	22.76	-	23.50	21.86	-	-	-	-	-
11AUG91:20:15 EEL	22.67	0.0	0.0	0.0	0.0	4.3	0.0	4.35	345.80	93.90	21.80	22.83	-	23.54	21.89	-	-	-	-	-
11AUG91:20:30 EEL	22.67	0.0	0.0	0.0	0.0	1.4	0.0	3.15	348.20	94.10	21.93	22.84	-	23.58	22.05	-	-	-	-	-
11AUG91:20:45 EEL	22.70	0.0	0.0	0.0	0.0	0.4	0.0	2.61	348.70	94.30	22.01	22.94	-	23.56	22.12	-	-	-	-	-
11AUG91:21:00 EEL	22.65	0.0	0.0	0.0	0.0	0.0	0.0	1.89	349.30	94.30	21.94	22.88	-	23.64	22.03	-	-	-	-	-
11AUG91:21:15 EEL	22.59	0.0	0.0	0.0	0.0	0.0	0.0	1.50	355.80	94.30	21.82	22.85	-	23.57	21.88	-	-	-	-	-
11AUG91:21:30 EEL	22.55	0.0	0.0	0.0	0.0	0.0	0.0	0.69	1.84	94.40	21.79	22.88	-	23.70	21.90	-	-	-	-	-
11AUG91:21:45 EEL	22.64	0.0	0.0	0.0	0.0	0.0	0.0	0.39	356.10	94.40	21.96	23.08	-	23.87	22.10	-	-	-	-	-
11AUG91:22:00 EEL	22.73	0.0	0.0	0.0	0.0	0.0	0.0	0.41	342.20	94.50	21.96	23.08	-	23.83	22.10	-	-	-	-	-
11AUG91:22:15 EEL	22.76	0.0	0.0	0.0	0.0	0.0	0.0	0.40	357.70	94.50	21.98	23.18	-	23.79	22.14	-	-	-	-	-
11AUG91:22:30 EEL	22.79	0.0	0.0	0.0	0.0	0.0	0.0	0.75	3.48	94.50	22.86	23.28	-	23.75	22.21	-	-	-	-	-
11AUG91:22:45 EEL	22.75	0.0	0.0	0.0	0.0	0.0	0.0	1.71	353.70	94.50	22.83	23.20	-	23.61	22.16	-	-	-	-	-
11AUG91:23:00 EEL	22.81	0.0	0.0	0.0	0.0	0.0	0.0	0.68	341.20	94.50	22.81	23.23	-	23.64	22.12	-	-	-	-	-
11AUG91:23:15 EEL	22.87	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.62	94.40	22.12	23.36	-	23.80	22.24	-	-	-	-	-
11AUG91:23:30 EEL	22.90	0.0	0.0	0.0	0.0	0.0	0.0	0.41	35.60	94.30	22.14	23.37	-	23.82	22.30	-	-	-	-	-
11AUG91:23:45 EEL	22.93	0.0	0.0	0.0	0.0	0.0	0.0	0.83	200.70	94.40	22.23	23.41	-	23.71	22.36	-	-	-	-	-

Appendix D

Image Metrics Data

WATERBURY - FIVE-12													
TIME	ALTITUDE (feet)	GLIDE (feet)	WIND (mph)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)	WIND (deg)
APC 20MAR91:04:45	37.00	91.17	-	0	5.9	1.8	3.4	6.3	6.4	7.0	7.6	3.6	1.3
APC 20MAR91:04:46	39.50	91.17	-	0	5.8	1.7	2.9	6.3	6.8	7.1	7.4	4.2	1.6
APC 20MAR91:04:48	42.00	91.17	-	0	5.5	1.3	2.5	6.0	6.3	7.0	7.6	4.5	1.7
APC 20MAR91:04:49	44.50	91.17	-	0	5.4	1.4	2.1	6.0	6.3	7.3	7.8	5.3	2.0
APC 20MAR91:04:51	47.00	91.17	-	0	5.4	1.7	2.4	6.0	6.2	7.5	8.2	5.1	2.1
APC 20MAR91:04:53	49.50	91.17	-	0	5.1	1.3	2.1	5.6	7.1	7.4	8.0	5.3	2.2
APC 20MAR91:04:54	52.00	91.17	-	0	5.8	1.2	2.6	6.7	7.9	8.3	8.7	5.7	2.3
APC 20MAR91:04:56	54.50	91.17	-	0	6.1	0.9	3.1	6.5	7.9	8.3	8.8	5.2	2.1
APC 20MAR91:04:57	57.00	91.17	-	0	6.1	1.0	3.5	6.7	7.8	8.3	8.7	4.8	2.0
APC 20MAR91:04:59	59.50	91.17	-	0	6.0	1.6	3.6	6.4	7.8	8.1	8.6	4.5	1.8
APC 20MAR91:05:01	62.00	91.17	-	0	5.6	1.0	3.1	6.3	7.2	7.7	8.2	4.6	2.1
APC 20MAR91:05:02	64.50	91.17	-	0	5.5	0.4	2.3	6.3	7.6	8.0	8.4	5.8	2.4
APC 20MAR91:05:04	67.00	91.17	-	0	5.5	0.8	2.5	6.0	7.8	8.0	8.3	5.5	2.3
APC 20MAR91:05:06	69.50	91.17	-	0	5.4	0.5	2.2	5.9	8.0	8.1	8.3	5.9	2.4
APC 20MAR91:05:07	72.00	91.17	-	0	5.3	0.3	1.8	5.8	8.0	8.1	8.3	6.3	2.4
APC 20MAR91:05:09	74.50	91.17	-	0	5.4	0.5	1.9	6.0	8.0	8.1	8.2	6.1	2.4
APC 20MAR91:05:10	77.00	91.17	-	0	5.3	0.4	1.5	6.1	8.0	8.1	8.2	6.3	2.4
APC 20MAR91:05:12	79.50	91.17	-	0	5.6	0.3	1.6	6.3	8.1	8.2	8.5	6.6	2.5
APC 20MAR91:05:14	82.00	91.17	-	0	5.9	-0.1	3.2	6.2	8.1	8.2	8.3	5.0	2.0
APC 20MAR91:05:15	84.50	91.17	-	0	5.8	-0.5	1.5	6.2	8.4	8.2	8.5	6.7	2.4
APC 20MAR91:05:17	87.00	91.17	-	0	5.2	-1.3	0.1	5.2	7.5	7.7	7.9	7.6	2.6
APC 20MAR91:05:19	89.50	91.17	-	0	6.6	-0.9	4.1	7.2	7.3	7.5	8.1	3.4	1.5
APC 20MAR91:05:45	37.00	91.17	121.57	3	3.9	2.4	3.1	3.8	3.3	4.8	5.1	1.7	0.7
APC 20MAR91:06:47	39.50	91.17	123.69	3	4.3	0.1	3.3	4.3	3.7	5.2	5.4	2.0	0.8
APC 20MAR91:06:49	42.00	91.17	125.63	3	4.1	-2.8	3.1	4.3	4.2	5.1	5.4	2.0	0.8
APC 20MAR91:06:51	44.50	91.17	127.74	3	4.4	-2.8	3.4	4.4	4.4	5.2	5.8	1.6	0.8
APC 20MAR91:06:54	47.00	91.17	129.86	3	4.8	1.8	3.7	4.9	4.7	5.7	7.1	1.9	0.7
APC 20MAR91:06:56	49.50	91.17	131.91	3	5.4	2.6	4.5	5.5	5.5	6.2	6.7	1.8	0.7
APC 20MAR91:06:58	52.00	91.17	133.80	3	5.6	0.2	4.3	5.8	5.8	6.5	6.8	2.2	1.0
APC 20MAR91:07:01	54.50	91.17	135.85	4	6.0	0.4	4.3	6.3	6.4	6.8	7.3	2.5	1.2
APC 20MAR91:07:03	57.00	91.17	137.08	4	6.3	0.8	5.1	6.6	6.6	7.1	7.4	2.0	1.0
APC 20MAR91:07:05	59.50	91.17	139.70	4	6.5	1.1	4.9	6.7	6.7	7.3	7.5	2.4	1.1
APC 20MAR91:07:07	62.00	91.17	141.68	4	6.9	1.4	5.4	7.1	7.1	7.5	7.9	2.1	1.1
APC 20MAR91:07:10	64.50	91.17	143.66	4	6.9	1.6	4.9	7.2	7.3	7.6	7.9	2.7	1.1
APC 20MAR91:07:12	67.00	91.17	145.57	4	7.2	1.5	4.6	7.5	7.4	7.9	8.2	3.3	1.3
APC 20MAR91:07:14	69.50	91.17	147.23	4	7.5	1.3	4.0	7.8	7.8	8.3	8.5	4.3	1.7
APC 20MAR91:07:16	72.00	91.17	149.07	4	7.6	1.4	4.0	8.1	8.0	8.5	11.5	6.5	1.8

		UNWEIGHTED : FAR-IR																						
SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BIRD (Degrees)	SEA (Degrees)	HUMIDITY (Degrees)	PERC 95 (Degrees)	MIDIAN (Degrees)	MODE (Degrees)	PERC 95 (Degrees)	MAXIMUM (Degrees)	ANG 90 (Degrees)	SD (Degrees)	ENTROPY (Diversity on 100)	SKETCHES (Diversity on 100)	CLUSTERS (Diversity on 100)	REYNOLDS (Diversity on 100)	CNT 05 (Degrees)	CNT 25 (Degrees)	CNT 50 (Degrees)	CNT 75 (Degrees)	CNT 95 (Degrees)		
APC	20MAR91:07:19	74.50	91.17	150.86	4	7.4	6.9	4.8	8.2	7.9	8.4	11.3	3.6	7.6	2.09	-3.93	9.5	7.6	0.02	-3.4	1.7	1.7	1.7	6.3
APC	20MAR91:07:21	77.00	91.17	152.35	4	7.9	1.7	4.0	8.7	8.7	9.2	9.2	5.2	7.6	2.07	-2.98	8.4	8.9	-0.04	-3.4	1.7	1.7	3.4	6.3
APC	20MAR91:07:23	79.50	91.17	154.00	4	9.4	2.5	8.1	9.7	9.5	10.7	10.4	2.2	1.5	2.24	-3.93	16.8	1.8	-0.10	-0.6	0.8	0.1	0.3	1.3
APC	20MAR91:07:26	82.00	91.17	155.53	4	9.1	2.8	5.2	9.5	9.6	18.0	11.8	4.9	1.8	2.37	-2.43	5.5	1.5	0.18	-0.8	0.8	0.3	0.6	1.4
APC	20MAR91:07:28	84.50	91.17	157.01	4	8.5	2.1	4.1	9.4	9.5	9.9	10.4	5.9	2.5	2.76	-1.67	1.7	2.5	-0.81	-1.8	-0.3	0.3	0.7	1.4
APC	20MAR91:07:30	87.00	91.17	158.09	4	9.0	2.1	3.4	9.6	9.5	10.0	10.1	4.6	2.3	2.12	-2.62	5.5	2.5	-0.03	-0.8	0.0	0.1	0.3	1.3
APC	20MAR91:07:33	89.50	91.17	159.27	4	9.5	3.0	6.0	10.0	10.0	10.3	10.4	4.3	1.5	2.19	-2.78	7.3	1.6	-0.04	-1.2	0.0	0.1	0.3	0.7
APC	20MAR91:08:36	37.00	91.17	100.68	3	10.7	9.3	9.8	10.7	10.4	11.7	12.6	1.9	0.6	2.45	0.23	-0.7	0.8	-0.05	-0.7	-0.3	0.1	0.4	0.8
APC	20MAR91:08:39	39.50	91.17	102.31	3	10.6	3.5	9.0	10.6	10.5	12.1	12.9	3.1	1.3	2.08	-0.59	1.9	1.2	0.06	-0.5	-0.1	0.1	0.4	0.8
APC	20MAR91:08:42	42.00	91.17	103.71	3	11.3	1.1	9.9	11.5	11.7	12.4	13.9	2.5	1.4	2.67	-3.59	21.9	1.0	0.21	-0.7	-0.3	0.0	0.3	0.9
APC	20MAR91:08:44	44.50	91.17	105.27	3	11.7	1.4	9.2	12.1	11.7	13.1	15.3	3.9	1.8	2.87	-2.96	11.6	2.1	-0.10	-1.7	-0.3	0.1	0.5	1.3
APC	20MAR91:08:49	47.00	91.17	106.60	3	12.2	7.5	11.2	12.4	12.5	13.7	15.8	2.5	1.2	2.77	-0.50	2.5	1.2	0.04	-0.8	-0.1	0.1	0.4	0.9
APC	20MAR91:08:53	49.50	91.17	108.11	3	13.3	9.4	12.1	13.3	13.2	14.8	16.3	2.6	1.1	2.83	-0.11	0.8	1.1	0.08	-0.6	-0.1	0.1	0.4	0.8
APC	20MAR91:08:54	52.00	91.17	109.37	3	13.3	6.3	12.1	13.3	12.7	15.2	15.9	3.2	1.6	2.96	-1.50	6.2	1.4	0.17	-0.5	-0.1	0.1	0.5	1.1
APC	20MAR91:09:00	54.50	91.17	110.82	3	13.2	5.8	12.0	13.1	12.4	15.1	16.0	3.1	1.5	2.96	-0.95	4.0	1.5	0.04	-0.2	0.0	0.2	0.4	0.8
APC	20MAR91:09:03	57.00	91.17	112.23	3	13.0	5.9	11.1	13.0	12.3	14.7	15.1	3.6	1.6	2.85	-2.04	6.8	1.9	-0.02	-0.7	-0.1	0.2	0.5	1.1
APC	20MAR91:09:06	59.50	91.17	113.37	3	13.3	4.5	11.0	13.4	13.0	14.6	15.2	3.6	1.4	2.71	-2.75	9.4	1.6	-0.01	-1.2	-0.1	0.1	0.4	1.2
APC	20MAR91:09:10	62.00	91.17	114.72	3	13.4	6.7	9.9	13.7	13.8	15.1	15.6	5.2	1.9	2.89	-2.39	6.9	1.9	-0.01	-1.2	-0.1	0.1	0.4	0.9
APC	20MAR91:09:13	64.50	91.17	115.79	3	13.8	4.5	10.6	14.1	14.0	15.4	16.0	4.8	1.9	2.86	-2.53	7.8	1.9	0.01	-1.2	-0.1	0.1	0.4	1.1
APC	20MAR91:09:17	67.00	91.17	117.05	3	14.1	5.9	11.1	14.4	14.2	15.7	16.5	4.6	2.1	2.90	-2.89	9.4	2.1	-0.04	-0.6	0.0	0.1	0.4	1.1
APC	20MAR91:09:20	69.50	91.17	118.03	3	14.0	5.7	8.9	14.3	14.2	16.0	17.0	7.1	2.3	3.00	-2.54	7.3	2.3	0.01	-0.8	-0.1	0.1	0.4	0.9
APC	20MAR91:09:24	72.00	91.17	119.22	3	13.6	5.5	9.4	14.1	13.5	15.5	17.1	6.1	2.4	3.05	-2.65	7.8	2.5	-0.05	-0.9	-0.1	0.1	0.5	1.3
APC	20MAR91:09:27	74.50	91.17	120.36	3	13.7	5.6	12.1	13.9	13.4	15.7	16.5	3.6	3.9	2.96	-2.33	8.1	3.9	0.05	-0.7	0.0	0.7	1.4	3.3
APC	20MAR91:09:30	76.50	91.17	121.21	3	13.9	5.3	11.1	14.3	13.4	15.9	16.5	4.8	5.1	2.93	-2.57	8.1	5.1	0.02	-0.7	0.0	0.7	0.7	3.3
APC	20MAR91:09:33	77.00	91.17	122.27	3	14.5	4.1	10.7	14.7	14.0	16.4	17.1	5.6	2.4	3.04	-2.62	7.0	2.5	-0.07	-0.6	-0.2	0.1	0.5	1.4
APC	20MAR91:09:37	82.00	91.17	123.02	3	14.5	4.5	12.5	14.5	13.8	16.4	17.7	4.1	2.0	3.10	-1.53	5.9	2.0	-0.00	-0.7	-0.1	0.1	0.5	1.4
APC	20MAR91:09:41	84.50	91.17	123.98	3	14.2	5.7	8.1	14.5	14.2	16.4	17.7	8.3	2.7	3.22	-2.71	4.8	2.7	0.00	-0.9	-0.2	0.1	0.5	1.4
APC	20MAR91:09:44	87.00	91.17	124.65	3	14.3	5.3	6.4	14.3	13.8	16.8	17.4	10.4	3.2	3.22	-1.73	3.0	3.3	-0.02	-0.8	-0.1	0.1	0.5	1.4
APC	20MAR91:09:48	89.50	91.17	125.52	3	14.8	4.1	12.1	14.6	14.1	17.1	18.0	4.9	2.2	3.13	-1.56	5.4	2.2	0.01	-1.3	0.0	0.1	0.4	1.2
APC	20MAR91:10:31	37.00	91.17	77.68	2	15.7	12.9	13.9	15.0	14.8	17.6	19.9	3.7	1.5	3.13	0.22	-0.3	1.6	-0.02	-1.1	-0.3	0.1	0.6	1.2
APC	20MAR91:10:35	39.50	91.17	78.86	2	16.2	9.8	14.2	16.2	15.1	18.3	19.8	4.1	1.7	3.22	-0.10	-0.6	1.7	0.00	-1.0	-0.3	0.0	0.5	1.2
APC	20MAR91:10:38	42.30	91.17	80.01	2	16.6	4.3	14.6	17.0	17.2	18.9	19.9	4.3	4.0	3.20	-1.27	5.8	3.5	0.06	-2.9	-0.6	0.6	1.2	4.0
APC	20MAR91:10:41	44.50	91.17	81.15	2	16.6	6.2	14.6	16.1	18.7	19.7	4.1	4.0	3.14	-1.92	7.5	4.6	-0.11	-3.5	-0.6	0.6	1.2	4.0	
APC	20MAR91:10:44	47.00	91.17	82.28	2	17.0	13.8	14.8	17.1	17.1	19.1	21.1	4.3	1.6	3.25	0.00	-0.5	1.6	0.02	-1.2	-0.4	0.1	0.7	1.2
APC	20MAR91:10:47	49.50	91.17	83.38	2	17.0	14.4	15.2	16.9	16.6	19.3	21.1	4.0	1.6	3.17	0.48	-0.4	1.5	0.17	-0.8	-0.3	0.1	0.5	1.4
APC	20MAR91:10:50	52.00	91.17	84.24	2	16.6	5.9	15.0	16.6	16.1	19.7	20.5	4.7	5.1	3.23	-1.53	6.9	3.5	0.27	-1.8	0.0	0.6	1.8	4.0
APC	20MAR91:10:53	54.50	91.17	85.31	2	16.1	5.4	13.5	16.1	15.7	19.5	20.7	6.0	6.1	3.32	-1.66	5.2	6.1	0.01	-3.5	0.0	0.6	1.8	4.6

[illegible]

UNIVERSITY : FAR-IR																							
LINE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	BOA	RAE (Deg)	MINIMUM (Deg)	PERC. 95 (Deg)	MEDIAN (Deg)	MEAN (Deg)	PERC. 50 (Deg)	PERC. 10 (Deg)	PERC. 5 (Deg)	PERC. 1 (Deg)	PERC. 0.5 (Deg)	PERC. 0.1 (Deg)	PERC. 0.05 (Deg)	PERC. 0.01 (Deg)	PERC. 0.001 (Deg)	PERC. 0.0001 (Deg)	PERC. 0.00001 (Deg)	PERC. 0.000001 (Deg)	PERC. 0.0000001 (Deg)	
APC	2004091:21:06	62.00	91.17	-	0 7.2	6.8	6.3	7.3	7.5	8.1	8.8	1.8	0.6	2.35	0.03	-0.3	0.5	0.09	-0.2	-0.1	0.1	0.1	0.4
APC	2004091:21:07	64.50	91.17	-	0 6.9	5.4	5.8	7.2	7.2	7.8	8.2	2.8	0.7	2.36	-0.53	-0.8	0.6	0.16	-0.2	-0.1	0.0	0.1	0.2
APC	2004091:21:09	67.00	91.17	-	0 6.9	5.6	6.8	7.1	7.5	7.9	8.4	1.9	0.5	2.38	-0.04	-1.3	0.7	0.05	-0.2	-0.1	0.1	0.1	0.2
APC	2004091:21:11	69.50	91.17	-	0 6.9	5.6	5.9	6.9	6.8	8.1	8.6	2.2	0.9	2.34	0.18	-1.3	0.8	0.05	-0.2	-0.1	0.1	0.1	0.2
APC	2004091:21:13	72.00	91.17	-	0 6.8	4.5	5.3	6.8	5.6	8.5	11.9	3.2	1.3	2.04	0.47	0.8	1.3	0.03	-0.5	-0.2	0.0	0.2	0.6
APC	2004091:21:16	74.50	91.17	-	0 7.2	3.6	5.5	7.3	8.3	8.7	11.2	3.2	1.2	2.91	-0.10	-1.2	1.2	-0.01	-0.6	-0.1	0.1	0.2	0.5
APC	2004091:21:18	77.00	91.17	-	0 7.0	5.1	5.7	7.0	5.9	8.5	9.1	2.8	1.0	2.80	0.11	-1.2	1.0	0.01	-0.5	-0.2	0.0	0.2	0.5
APC	2004091:21:20	79.50	91.17	-	0 7.8	5.1	5.5	6.9	6.0	8.8	9.4	3.3	1.1	2.95	0.25	-1.0	1.0	0.11	-0.3	-0.2	0.0	0.2	0.4
APC	2004091:21:23	82.00	91.17	-	0 7.5	5.0	5.6	7.4	8.6	9.8	9.8	3.4	1.2	2.99	-0.17	-1.1	1.2	0.03	-0.6	-0.3	0.0	0.2	0.7
APC	2004091:21:25	84.50	91.17	-	0 7.7	5.1	6.1	7.7	8.5	9.2	10.3	3.1	1.1	2.96	-0.13	-0.9	1.0	0.11	-0.4	-0.2	0.1	0.2	0.6
APC	2004091:21:27	87.00	91.17	-	0 7.8	5.5	6.0	8.0	8.0	10.1	11.1	4.1	1.5	3.13	0.25	-1.0	1.3	0.14	-0.3	-0.1	0.0	0.2	0.5
APC	2004091:21:30	89.50	91.17	-	0 8.5	5.1	5.6	7.9	6.9	11.4	11.8	5.8	2.2	3.33	0.19	-1.5	2.0	0.10	-0.7	-0.1	0.1	0.2	0.6
APC	2004091:21:32	91.17	-	0 4.7	2.6	2.9	3.4	6.7	3.6	7.2	8.0	3.7	1.6	2.99	0.44	-1.2	1.4	-0.08	-0.8	-0.3	0.1	0.4	1.0
APC	2004091:21:34	93.00	91.17	-	0 5.0	2.9	3.4	6.7	3.6	7.2	8.0	3.4	1.2	2.92	0.59	-0.2	1.0	0.06	-0.4	-0.1	0.1	0.2	0.5
APC	2004091:21:36	94.50	91.17	-	0 4.9	2.9	3.5	6.8	4.5	6.4	9.8	2.9	1.0	2.86	0.32	-0.1	0.9	0.10	-0.4	-0.2	0.1	0.3	0.6
APC	2004091:21:38	97.00	91.17	-	0 5.3	3.2	4.1	5.3	5.0	7.1	8.6	3.0	1.1	2.89	0.72	0.4	1.0	0.10	-0.6	-0.2	0.1	0.3	0.7
APC	2004091:21:40	99.50	91.17	-	0 5.7	4.2	4.6	5.8	6.3	6.6	7.9	2.0	0.8	2.52	0.11	-0.6	0.7	0.06	-0.4	-0.2	0.1	0.2	0.5
APC	2004091:21:42	102.00	91.17	-	0 6.1	4.8	5.1	6.3	6.3	7.0	7.9	1.9	0.7	2.43	-0.28	-0.7	0.6	0.14	-0.3	-0.1	0.1	0.1	0.3
APC	2004091:21:44	104.50	91.17	-	0 6.6	5.6	5.9	6.6	6.4	7.6	8.1	1.7	0.6	2.27	0.22	-1.0	0.6	0.04	-0.4	-0.1	0.0	0.2	0.5
APC	2004091:21:46	107.00	91.17	-	0 6.9	5.9	6.3	6.8	6.7	8.2	8.6	1.9	0.7	2.30	0.56	0.5	0.6	0.04	-0.4	-0.1	0.0	0.1	0.7
APC	2004091:21:48	109.50	91.17	-	0 7.1	6.1	6.6	7.1	7.1	7.9	8.6	1.5	0.5	2.10	0.95	1.4	0.5	-0.02	-0.3	-0.1	0.1	0.2	0.4
APC	2004091:21:50	112.00	91.17	-	0 7.3	6.2	6.8	7.4	7.5	7.9	8.9	1.1	0.4	1.98	0.37	1.4	0.4	0.04	-0.3	-0.1	0.1	0.2	0.5
APC	2004091:21:52	114.50	91.17	-	0 7.5	6.6	7.0	7.6	7.8	8.2	10.3	1.2	0.5	2.05	1.06	3.7	0.5	0.06	-0.2	0.0	0.1	0.2	0.3
APC	2004091:21:54	117.00	91.17	-	0 7.7	6.5	7.0	7.7	7.7	8.5	10.4	1.5	0.5	2.07	0.90	3.6	0.5	0.09	-0.3	0.0	0.1	0.2	0.5
APC	2004091:21:56	119.50	91.17	-	0 7.8	6.3	6.7	7.8	7.7	8.8	11.8	2.1	0.8	2.46	0.70	3.9	0.6	0.16	-0.4	-0.1	0.1	0.2	0.5
APC	2004091:21:58	122.00	91.17	-	0 7.8	6.9	7.1	7.8	7.8	8.6	10.5	1.5	0.5	2.23	0.04	0.7	0.5	0.06	-0.3	-0.1	0.2	0.3	0.4
APC	2004091:21:59	124.50	91.17	-	0 7.4	6.3	6.7	7.4	7.5	8.2	9.0	1.5	0.5	2.26	0.08	-0.4	0.5	-0.01	-0.3	-0.2	0.1	0.3	0.5
APC	2004091:22:01	127.00	91.17	-	0 7.5	6.4	6.8	7.5	7.4	8.5	9.4	1.7	0.6	2.32	0.30	-0.2	0.5	0.05	-0.2	-0.1	0.1	0.2	0.3
APC	2004091:22:03	129.50	91.17	-	0 7.8	6.6	6.8	7.8	7.1	9.0	9.7	2.2	0.7	2.35	0.36	-0.6	0.7	-0.00	-0.3	-0.2	0.0	0.2	0.5
APC	2004091:22:05	132.00	91.17	-	0 7.8	6.7	7.1	7.8	7.7	8.7	9.8	1.6	0.6	2.29	0.33	-0.2	0.6	0.03	-0.3	-0.1	0.1	0.2	0.4
APC	2004091:22:07	134.50	91.17	-	0 7.8	6.7	7.1	7.8	7.7	8.7	9.8	1.6	0.6	2.29	0.33	-0.2	0.6	0.03	-0.3	-0.1	0.1	0.2	0.4
APC	2004091:22:09	137.00	91.17	-	0 7.8	6.7	7.1	7.8	7.7	8.7	9.8	1.6	0.6	2.29	0.33	-0.2	0.6	0.03	-0.3	-0.1	0.1	0.2	0.4
APC	2004091:22:11	139.50	91.17	-	0 8.3	5.7	6.2	8.0	6.7	10.6	10.9	4.4	1.7	3.09	0.18	-1.6	1.6	0.09	-0.5	-0.1	0.1	0.2	0.4
APC	2004091:22:13	142.00	91.17	-	0 2.6	0.6	0.9	2.5	1.3	4.9	5.4	4.0	1.5	3.06	0.38	-1.1	1.5	-0.01	-0.3	-0.1	0.0	0.1	0.4
APC	2004091:22:15	144.50	91.17	-	0 2.8	0.6	1.1	2.7	1.5	4.9	5.3	3.8	1.4	3.00	0.33	-1.1	1.4	-0.02	-0.7	-0.2	0.1	0.3	0.7
APC	2004091:22:17	147.00	91.17	-	0 3.1	1.6	2.1	2.8	2.6	5.1	5.5	3.1	1.1	2.73	0.00	-0.6	1.2	-0.07	-0.6	-0.2	0.1	0.3	0.8

		UNRECORDED : 148-11															
SITE	TIME	ALTIMETER (feet)	ELEVATION (feet)	BIRD (feet)	MEAN (feet)	MINIMUM (feet)	MAXIMUM (feet)	MODAL (feet)	MODE (feet)	MAXIMUM (feet)	MODE (feet)	MODE (feet)	MODE (feet)	MODE (feet)	MODE (feet)	MODE (feet)	MODE (feet)
APC	2100091:03:15	82.00	91.17	-	0 7.8	6.9	6.3	7.1	7.2	7.7	8.4	1.5	0.5	2.16	0.04	-0.8	0.5
APC	2100091:03:17	84.50	91.17	-	0 7.8	5.9	6.2	7.8	7.8	7.8	8.9	1.6	0.5	2.28	-0.05	-0.7	0.5
APC	2100091:03:19	87.00	91.17	-	0 6.7	5.7	6.8	6.7	6.9	7.4	8.2	1.4	0.5	2.13	-0.01	-1.0	0.4
APC	2100091:03:21	89.50	91.17	-	0 7.1	5.8	6.2	7.1	6.3	8.1	8.4	1.9	0.7	2.36	0.06	-1.5	0.7
APC	2100091:04:00	37.00	91.17	-	0 0.8	-0.8	0.2	0.9	0.8	1.5	2.4	1.6	0.4	2.07	0.09	-0.3	0.4
APC	2100091:04:02	42.00	91.17	-	0 1.1	0.1	0.5	1.0	1.1	2.1	2.8	1.6	0.5	2.07	0.06	0.4	0.5
APC	2100091:04:05	49.00	91.17	-	0 2.4	1.8	2.0	2.3	2.2	3.2	3.9	1.2	0.4	1.78	1.03	0.8	0.4
APC	2100091:04:08	44.50	91.17	-	0 1.9	1.1	1.4	1.9	2.0	2.5	3.3	1.1	0.4	1.93	0.35	-0.4	0.4
APC	2100091:04:11	47.00	91.17	-	0 2.8	2.1	2.4	2.7	2.6	3.3	3.6	0.9	0.3	1.69	0.59	-0.2	0.3
APC	2100091:04:14	49.50	91.17	-	0 2.6	1.8	2.3	2.6	2.6	3.0	3.3	0.6	0.2	1.46	0.83	0.8	0.2
APC	2100091:04:17	52.00	91.17	-	0 3.8	2.4	2.7	3.0	2.9	3.4	3.8	1.0	0.4	1.85	0.43	-0.6	0.4
APC	2100091:04:19	54.50	91.17	-	0 2.8	2.4	2.4	2.8	2.8	3.4	3.8	1.0	0.4	1.85	0.43	-0.6	0.4
APC	2100091:04:22	57.00	91.17	-	0 3.5	2.4	3.1	3.6	3.1	4.1	4.3	1.1	0.4	1.92	0.03	-1.0	0.4
APC	2100091:04:25	59.50	91.17	-	0 3.1	2.3	2.6	3.1	2.8	3.7	4.7	1.1	0.4	1.89	0.24	-1.2	0.4
APC	2100091:04:28	62.00	91.17	-	0 3.4	2.7	3.0	3.2	3.1	4.0	4.3	1.0	0.4	1.71	0.56	-1.1	0.4
APC	2100091:04:31	64.50	91.17	-	0 3.1	2.4	2.7	3.1	3.0	3.6	3.9	0.9	0.3	1.77	0.13	-0.5	0.3
APC	2100091:04:34	67.00	91.17	-	0 3.9	3.4	3.6	3.8	3.7	4.4	5.2	0.8	0.3	1.57	0.93	0.2	0.3
APC	2100091:04:37	69.50	91.17	-	0 3.3	2.5	3.0	3.2	3.1	3.8	5.1	0.8	0.3	1.66	1.43	5.0	0.3
APC	2100091:04:40	72.00	91.17	-	0 3.4	2.7	3.2	3.6	3.5	4.2	5.1	1.8	0.4	1.87	0.39	-0.7	0.4
APC	2100091:04:42	74.50	91.17	-	0 3.4	3.8	3.2	3.4	3.3	3.8	4.1	0.6	0.2	1.29	0.67	0.8	0.2
APC	2100091:04:45	77.00	91.17	-	0 3.0	2.3	2.5	2.9	2.7	3.7	4.0	1.2	0.4	1.95	0.33	-1.2	0.4
APC	2100091:04:48	79.50	91.17	-	0 3.5	2.9	3.1	3.5	3.2	4.0	4.3	0.9	0.3	1.74	0.31	-0.8	0.3
APC	2100091:04:51	82.00	91.17	-	0 3.3	2.5	2.7	3.3	3.7	3.9	4.2	1.2	0.4	1.99	-0.09	-1.8	0.4
APC	2100091:04:54	84.50	91.17	-	0 3.5	2.7	3.0	3.6	3.8	4.1	4.3	1.1	0.4	1.93	-0.15	-1.1	0.4
APC	2100091:04:57	87.00	91.17	-	0 3.8	2.8	3.0	3.8	3.2	4.7	5.4	1.7	0.7	2.16	0.08	-1.6	0.6
APC	2100091:05:00	89.50	91.17	-	0 6.2	5.5	5.7	6.3	6.4	6.8	7.4	1.0	0.3	1.83	-0.05	-0.5	0.3
APC	2100091:05:03	92.00	91.17	122.67	3 5.7	4.7	5.1	5.7	5.6	6.5	7.1	1.3	0.5	2.07	0.27	-1.2	0.5
APC	2100091:05:06	94.50	91.17	124.98	3 5.7	5.8	5.4	5.7	5.6	6.2	7.0	0.8	0.3	1.45	0.53	0.2	0.3
APC	2100091:05:09	97.00	91.17	129.40	3 5.5	4.7	5.1	5.5	5.3	6.0	6.9	0.9	0.3	1.72	0.48	-0.3	0.3
APC	2100091:05:12	99.50	91.17	131.51	3 5.7	5.8	5.4	5.7	5.6	6.2	7.0	0.8	0.3	1.54	-0.02	-0.8	0.2
APC	2100091:05:15	102.00	91.17	133.79	3 6.3	5.7	5.9	6.3	6.4	6.6	6.9	0.7	0.3	1.54	-0.02	-0.8	0.2
APC	2100091:05:18	104.50	91.17	135.89	4 6.7	6.2	6.4	6.7	6.8	7.0	7.2	0.6	0.2	1.31	-0.15	-1.0	0.2
APC	2100091:05:21	107.00	91.17	138.15	4 6.9	6.3	6.6	6.9	7.0	7.2	7.4	0.6	0.2	1.32	0.05	-0.3	0.2
APC	2100091:05:24	109.50	91.17	140.41	4 6.7	6.8	6.4	6.7	6.8	7.0	7.2	0.6	0.2	1.49	-0.10	-0.6	0.2
APC	2100091:05:27	112.00	91.17	142.65	4 6.8	6.1	6.5	6.9	7.2	7.3	7.5	0.6	0.2	1.48	-0.30	-0.5	0.2
APC	2100091:05:30	114.50	91.17	144.67	4 7.0	6.4	6.7	7.0	6.9	7.3	7.5	0.5	0.2	1.43	0.16	-0.8	0.2
APC	2100091:05:33	117.00	91.17	146.67	4 7.0	6.4	6.7	7.0	6.9	7.3	7.5	0.5	0.2	1.43	0.16	-0.8	0.2

UNIVERSITY OF MARYLAND - FAIR-FX														
DATE	TIME	AZIMUTH (DEGREES)	ELEVATION (DEGREES)	BDN (DEGREES)	RA (DEGREES)	DEC (DEGREES)	RA (DEGREES)	DEC (DEGREES)	RA (DEGREES)	DEC (DEGREES)	RA (DEGREES)	DEC (DEGREES)	RA (DEGREES)	DEC (DEGREES)
16.AUG.91:07:07	47.00	91.17	151.37	4	25.0	23.3	24.3	25.1	25.1	25.2	25.5	25.1	1.2	0.4
16.AUG.91:07:11	49.50	91.17	152.85	4	25.7	23.8	25.3	25.7	25.7	25.1	25.1	0.8	0.3	1.67
16.AUG.91:07:15	52.00	91.17	154.01	4	26.4	24.6	24.1	26.5	26.4	26.4	25.1	0.7	0.2	1.57
16.AUG.91:07:18	54.50	91.17	155.06	4	26.9	25.1	25.9	26.3	26.3	26.3	25.7	0.8	0.3	1.67
16.AUG.91:07:22	57.00	91.17	156.22	4	27.3	25.1	26.9	26.4	26.4	26.4	25.7	0.8	0.2	1.65
16.AUG.91:07:25	59.50	91.17	156.99	4	27.9	27.9	28.7	29.3	29.3	29.6	31.1	0.9	0.3	1.67
16.AUG.91:07:29	62.00	91.17	157.61	4	28.2	27.8	28.8	29.3	29.3	29.2	29.7	0.8	0.2	1.67
16.AUG.91:07:33	64.50	91.17	158.30	4	28.9	27.7	28.5	29.0	29.0	29.2	29.7	0.9	0.2	1.66
16.AUG.91:07:37	67.00	91.17	158.56	4	29.1	27.4	28.4	29.2	29.2	29.7	30.3	1.0	0.3	1.88
16.AUG.91:07:41	69.50	91.17	158.63	4	29.6	27.8	29.1	29.7	29.6	30.2	30.6	1.1	0.4	2.00
16.AUG.91:07:44	72.00	91.17	158.74	4	30.3	28.5	29.6	30.4	30.4	30.9	31.0	1.3	0.5	2.17
16.AUG.91:07:48	74.50	91.17	158.42	4	30.4	27.8	28.9	30.5	30.4	31.0	31.6	1.2	0.5	2.09
16.AUG.91:07:51	77.00	91.17	157.92	4	32.5	30.1	32.1	32.7	32.5	33.6	33.6	1.2	0.4	2.06
16.AUG.91:07:55	79.50	91.17	157.45	4	33.8	30.1	32.4	33.8	33.3	34.4	34.4	1.2	0.4	2.05
16.AUG.91:07:59	82.00	91.17	156.43	4	31.3	31.1	30.9	31.9	31.7	32.6	47.2	1.7	1.2	2.41
16.AUG.91:08:02	84.50	91.17	155.68	4	32.8	29.3	30.7	32.0	31.8	33.2	34.5	2.5	0.7	2.68
16.AUG.91:08:06	87.00	91.17	154.76	4	31.4	29.8	30.4	31.6	31.5	32.2	32.6	1.7	0.6	2.27
16.AUG.91:08:10	89.50	91.17	153.57	4	31.4	27.8	30.3	31.6	31.5	32.8	33.1	2.6	0.8	2.74
16.AUG.91:08:14	92.00	91.17	152.23	3	29.8	28.2	28.8	29.9	30.0	31.0	31.6	2.2	0.7	2.59
16.AUG.91:08:18	94.50	91.17	123.75	3	29.3	28.8	28.4	29.5	29.7	30.7	31.5	1.9	0.6	2.46
16.AUG.91:08:22	97.00	91.17	125.23	3	29.6	27.4	28.1	29.7	29.9	30.7	31.4	2.3	0.7	2.61
16.AUG.91:08:26	99.50	91.17	126.45	3	29.8	27.1	28.4	29.9	29.8	30.7	31.6	2.4	0.7	2.59
16.AUG.91:08:30	102.00	91.17	127.00	3	30.0	27.2	28.6	30.0	30.0	31.1	31.6	2.5	0.7	2.58
16.AUG.91:08:34	104.50	91.17	127.36	3	30.1	27.4	28.9	30.2	30.0	31.2	31.8	2.3	0.7	2.62
16.AUG.91:08:38	107.00	91.17	129.31	3	30.3	27.9	29.3	30.3	30.1	31.1	32.5	1.8	0.6	2.40
16.AUG.91:08:42	109.50	91.17	131.55	3	30.6	28.4	29.5	30.7	30.6	31.3	31.6	1.8	0.5	2.29
16.AUG.91:08:46	112.00													

WAVEBAND : FAS-12

WAVEBAND : FAR-IR

SITE	TIME	ALTIM (Degrees)	ELEVATION (Degrees)	BIRD (Degrees)	NOA	MINIMUM (Degrees)	PERCENT (Degrees)	MAXIMUM (Degrees)	MODE (Degrees)	PERCENT (Degrees)	MAXIMUM (Degrees)	ENTR (Degrees)	RETNORS (Degrees)	CLUTTER (Degrees)	RETNORS (Degrees)	CNT.05 (Degrees)	CNT.25 (Degrees)	CNT.50 (Degrees)	CNT.75 (Degrees)	CNT.95 (Degrees)			
APC	16JUL91:16:55	49.50	91.17	49.97	2	35.0	33.1	33.8	35.0	35.3	36.4	45.1	2.6	1.0	2.79	2.39	13.0	1.1	-0.09	-0.7	-0.2	0.0	1.0
APC	16JUL91:16:57	52.00	91.17	42.50	2	35.0	31.3	34.3	35.1	35.0	36.1	41.6	1.8	0.7	2.50	0.49	10.9	0.7	-0.04	-0.3	-0.1	0.1	0.2
APC	16JUL91:16:58	54.50	91.17	47.05	2	35.2	31.3	34.6	35.3	35.1	36.2	41.1	1.6	0.7	2.38	-1.11	11.2	0.7	-0.01	-0.2	-0.1	0.1	0.2
APC	16JUL91:17:01	57.00	91.17	45.63	2	35.6	31.6	34.6	35.7	35.9	36.6	47.8	2.0	0.8	2.56	2.24	35.7	0.7	0.12	-0.4	-0.2	0.1	0.3
APC	16JUL91:17:03	59.50	91.17	44.25	1	35.8	31.6	34.6	35.9	35.4	37.0	48.6	2.4	1.1	2.81	2.47	23.1	1.0	0.09	-0.3	-0.1	0.1	0.3
APC	16JUL91:17:04	62.00	91.17	42.89	1	35.6	31.6	34.5	35.9	36.4	36.7	40.6	2.2	0.9	2.63	-0.53	2.3	0.8	0.05	-0.2	0.0	0.1	0.2
APC	16JUL91:17:07	64.50	91.17	41.59	1	36.2	32.3	35.2	34.8	37.0	37.6	42.6	2.5	1.0	2.59	-0.36	2.7	1.0	0.02	-0.2	0.0	0.2	0.4
APC	16JUL91:17:09	67.00	91.17	40.33	1	35.9	31.8	34.9	36.5	36.5	37.2	38.2	2.3	1.0	2.50	-1.38	2.8	1.0	-0.00	-0.4	0.0	0.2	0.4
APC	16JUL91:17:10	69.50	91.17	39.12	1	36.3	31.9	34.8	36.7	36.9	37.5	45.4	2.7	1.0	2.63	-0.74	5.3	1.0	0.03	-0.6	0.0	0.2	0.4
APC	16JUL91:17:13	72.00	91.17	37.98	1	36.5	31.9	35.0	36.7	36.7	39.6	53.0	4.5	2.1	5.02	5.49	19.2	2.1	0.04	-0.6	0.0	0.2	0.4
APC	16JUL91:17:15	74.50	91.17	36.91	1	36.7	32.6	35.2	36.9	36.7	38.3	53.2	3.1	1.7	2.86	5.07	41.5	1.9	-0.16	-0.6	0.0	0.2	0.4
APC	16JUL91:17:16	77.00	91.17	35.91	1	36.9	32.6	35.9	37.3	37.3	38.5	40.6	2.7	1.0	2.72	-0.67	2.8	1.0	-0.01	-0.6	0.0	0.2	0.4
APC	16JUL91:17:19	79.50	91.17	35.00	1	36.9	32.6	35.9	37.3	37.3	38.7	44.3	2.9	1.0	2.89	-0.38	4.9	1.0	0.04	-1.2	0.0	0.2	0.4
APC	16JUL91:17:21	82.00	91.17	34.18	1	38.4	33.1	36.4	37.6	37.2	47.9	61.2	11.6	3.7	2.58	2.96	9.5	2.9	0.16	-2.5	-0.4	0.4	0.5
APC	16JUL91:17:22	84.50	91.17	33.47	1	38.2	32.5	36.2	37.6	37.4	46.5	50.0	10.3	3.1	3.41	1.66	2.4	3.1	-0.01	-1.4	-0.4	0.2	0.8
APC	16JUL91:17:25	87.00	91.17	32.66	1	36.8	32.1	34.7	37.1	37.2	38.0	44.1	3.3	1.2	2.71	-1.99	6.9	1.2	-0.04	-0.3	0.0	0.1	0.2
APC	16JUL91:17:27	89.50	91.17	32.38	1	37.6	32.4	36.4	37.5	37.4	39.7	42.2	3.3	1.1	2.91	-0.11	4.0	1.1	0.02	-0.5	-0.2	0.1	0.3
APC	16JUL91:18:48	37.00	91.17	66.97	2	31.1	30.5	30.8	31.1	31.0	31.4	31.8	0.5	0.2	1.35	0.38	0.5	0.2	0.05	-0.0	0.0	0.0	0.1
APC	16JUL91:18:49	39.50	91.17	64.86	2	31.1	30.1	30.8	31.1	31.1	31.7	36.1	0.9	0.3	1.74	2.76	25.4	0.3	0.08	-0.1	-0.0	0.0	0.1
APC	16JUL91:18:51	42.00	91.17	62.61	2	31.3	30.6	31.0	31.3	31.3	32.0	35.8	1.0	0.4	1.73	3.68	22.6	0.3	0.12	-0.2	-0.0	0.0	0.1
APC	16JUL91:18:53	44.50	91.17	60.50	2	31.4	30.6	31.0	31.3	31.3	32.4	42.9	1.2	0.7	1.91	7.00	81.4	0.7	-0.16	-0.4	-0.1	0.1	0.2
APC	16JUL91:18:54	47.00	91.17	58.37	2	31.7	30.8	31.3	31.7	31.6	32.5	42.9	1.2	0.7	1.91	7.00	81.4	0.7	-0.16	-0.4	-0.1	0.1	0.2
APC	16JUL91:18:56	49.50	91.17	56.24	2	31.8	31.0	31.5	31.8	31.7	32.2	37.0	0.7	0.3	1.65	4.32	37.3	0.4	-0.14	-0.2	0.0	0.1	0.2
APC	16JUL91:18:58	52.00	91.17	53.98	2	31.8	30.2	31.5	31.8	31.8	32.2	34.5	0.7	0.3	1.58	0.42	13.4	0.3	-0.03	-0.1	-0.0	0.0	0.1
APC	16JUL91:19:00	54.50	91.17	51.85	2	31.9	30.1	31.6	32.0	31.9	32.4	34.5	0.7	0.3	1.67	-1.18	10.4	0.3	-0.03	-0.1	0.0	0.0	0.1
APC	16JUL91:19:06	64.50	91.17	43.17	1	32.7	31.0	32.4	32.7	32.7	33.2	35.4	0.8	0.3	1.79	-0.16	7.0	0.3	-0.01	-0.2	0.0	0.1	0.2
APC	16JUL91:19:08	67.00	91.17	41.02	1	32.2	30.6	31.9	32.3	32.2	32.6	36.2	0.7	0.3	1.75	-0.67	11.6	0.3	0.04	-0.3	0.0	0.1	0.2
APC	16JUL91:19:10	69.50	91.17	38.78	1	32.3	30.6	32.0	32.4	32.5	32.7	36.2	0.7	0.3	1.75	-0.67	11.6	0.3	0.04	-0.3	0.0	0.1	0.2
APC	16JUL91:19:12	72.00	91.17	36.64	1	33.0	29.8	32.3	32.9	32.8	34.6	42.9	2.3	1.2	2.28	4.75	27.9	1.3	-0.03	-0.6	-0.2	0.1	0.2
APC	16JUL91:19:13	74.50	91.17	34.49	1	32.9	30.4	32.5	32.9	32.7	33.7	42.4	1.2	0.8	2.05	6.93	61.8	1.0	-0.20	-0.2	0.0	0.2	0.4
APC	16JUL91:19:15	77.00	91.17	32.27	1	32.9	31.0	32.5	33.1	32.9	33.7	34.9	1.2	0.4	1.90	-0.54	4.0	0.4	-0.04	-0.2	0.0	0.2	0.6
APC	16JUL91:19:18	82.00	91.17	28.01	1	34.0	31.8	33.2	33.4	33.4	34.9	45.8	6.0	1.9	2.49	3.15	11.1	1.4	0.15	-1.4	-0.2	0.2	2.3
APC	16JUL91:19:20	84.50	91.17	25.88	1	33.7	31.6	32.6	33.2	32.9	34.2	39.5	5.6	1.7	2.67	2.00	3.4	1.7	-0.07	-0.2	0.1	0.4	1.5
APC	16JUL91:19:22	87.00	91.17	23.71	1	32.7	30.7	32.0	32.7	32.7	33.7	37.2	1.7	0.5	1.92	-0.26	6.1	0.5	0.04	-0.2	-0.0	0.1	0.4
APC	16JUL91:19:24	89.50	91.17	21.62	1	33.5	31.4	32.6	33.4	32.9	34.9	39.5	2.3	0.7	2.60	0.92	2.6	0.7	0.12	-0.2	-0.1	0.1	0.2
APC	16JUL91:21:00	37.00	91.17		0	26.9	25.7	26.2	26.6	26.5	28.2	28.4	2.0	0.7	2.24	0.86	-0.6	0.7	-0.02	-0.2	-0.0	0.0	0.1
APC	16JUL91:21:02	39.50	91.17		0	26.8	25.7	26.2	26.5	26.4	28.1	29.9	1.9	0.6	2.16	1.00	-0.3	0.7	-0.08	-0.3	-0.0	0.0	0.1

WAVEFORM : FAR-IR																						
TIME	SLIT	WAVELENGTH (nm)	ELEVATION (Deg)	BIDIR (Deg)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)	WAVELENGTH (nm)								
APC 16JUL91:21:04	42.00	91.17	0	27.8	25.7	26.3	26.9	26.5	28.1	30.5	1.8	0.5	2.32	0.74	0.2	8.6	0.02	-0.2	0.0	0.0	0.1	0.2
APC 16JUL91:21:06	44.50	91.17	0	26.9	25.5	26.3	26.9	26.5	28.1	29.8	1.7	0.5	2.20	1.03	1.0	0.5	0.01	-0.2	-0.0	0.0	0.1	0.2
APC 16JUL91:21:08	47.00	91.17	0	26.9	25.3	26.2	26.9	26.9	28.0	33.1	1.8	0.5	2.24	1.51	11.2	8.5	0.02	-0.2	-0.1	0.0	0.1	0.2
APC 16JUL91:21:10	49.50	91.17	0	27.0	26.1	26.6	27.0	26.7	28.0	28.4	1.4	0.4	2.02	0.89	0.5	0.4	-0.01	-0.2	-0.1	0.0	0.1	0.3
APC 16JUL91:21:15	54.50	91.17	0	27.3	26.3	26.7	27.3	27.4	27.8	28.2	1.2	0.4	1.94	-0.20	-0.4	0.3	0.08	-0.2	-0.1	0.0	0.1	0.3
APC 16JUL91:21:17	57.00	91.17	0	27.7	26.8	27.3	27.7	27.6	28.0	28.6	0.7	0.2	1.48	-0.50	1.1	0.2	-0.01	-0.2	-0.0	0.0	0.1	0.1
APC 16JUL91:21:19	59.50	91.17	0	27.6	26.2	27.2	27.6	27.7	28.0	28.9	0.8	0.3	1.68	-0.78	2.6	0.3	-0.02	-0.4	-0.1	0.0	0.1	0.3
APC 16JUL91:21:21	62.00	91.17	0	27.7	26.9	27.4	27.7	27.7	28.2	30.6	0.9	0.3	1.72	1.15	5.9	0.3	0.01	-0.2	-0.1	0.0	0.1	0.2
APC 16JUL91:21:23	64.50	91.17	0	27.8	27.0	27.3	27.8	27.7	28.4	30.0	1.0	0.3	1.85	0.24	0.6	0.3	0.10	-0.2	-0.1	0.0	0.1	0.2
APC 16JUL91:21:25	67.00	91.17	0	27.8	27.1	27.4	27.9	27.8	28.3	29.3	0.8	0.3	1.71	0.29	0.9	0.3	0.01	-0.2	-0.1	0.0	0.1	0.2
APC 16JUL91:21:27	69.50	91.17	0	27.9	26.9	27.4	27.9	28.0	28.4	29.1	1.0	0.3	1.82	-0.05	0.2	0.3	-0.01	-0.2	-0.0	0.0	0.1	0.3
APC 16JUL91:21:30	72.00	91.17	0	28.2	26.5	27.5	28.2	28.2	28.8	32.7	1.3	0.5	2.13	2.50	26.2	0.5	-0.01	-0.3	-0.1	0.0	0.1	0.4
APC 16JUL91:21:32	74.50	91.17	0	28.3	25.5	27.8	28.3	28.1	29.0	31.0	1.2	0.4	1.96	-1.17	9.3	0.4	0.00	-0.3	-0.0	0.0	0.1	0.4
APC 16JUL91:21:34	77.00	91.17	0	28.3	25.4	27.8	28.3	28.2	29.1	30.0	1.3	0.4	1.96	-0.57	7.2	0.4	-0.05	-0.2	-0.0	0.0	0.1	0.3
APC 16JUL91:21:36	79.50	91.17	0	28.3	26.9	27.8	28.3	28.3	29.2	30.2	1.4	0.4	1.91	1.28	5.1	0.4	0.11	-0.2	-0.0	0.0	0.1	0.3
APC 16JUL91:21:38	82.00	91.17	0	28.5	26.7	27.8	28.3	28.3	30.0	30.4	2.2	0.7	2.34	1.12	0.7	0.6	0.12	-0.4	-0.1	0.0	0.1	0.4
APC 16JUL91:21:40	84.50	91.17	0	28.4	26.3	27.5	28.4	28.5	29.9	30.5	2.4	0.7	2.59	0.68	0.3	0.6	0.10	-0.4	-0.1	0.0	0.1	0.4
APC 16JUL91:21:42	87.00	91.17	0	28.0	25.7	26.9	28.1	28.1	29.1	30.2	2.2	0.6	2.51	-0.35	1.0	0.7	-0.07	-0.6	-0.1	0.0	0.1	0.4
APC 16JUL91:21:45	89.50	91.17	0	28.3	25.4	27.1	28.4	28.1	29.4	30.2	2.4	0.8	2.67	-0.41	-0.2	0.7	0.04	-0.3	-0.1	0.0	0.1	0.4
APC 16JUL91:21:49	97.00	91.17	0	26.3	25.8	26.1	26.4	26.3	26.5	26.7	0.4	0.1	1.05	-0.22	0.8	0.1	-0.03	-0.0	0.0	0.0	0.0	0.1
APC 16JUL91:22:53	42.00	91.17	0	27.0	26.8	26.5	26.9	26.8	27.8	28.3	1.3	0.4	2.00	0.68	-0.3	0.4	0.05	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:22:55	44.50	91.17	0	26.9	25.9	26.4	26.9	26.9	27.8	28.4	1.3	0.4	2.02	0.72	-0.1	0.4	0.00	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:22:57	47.00	91.17	0	27.4	26.4	27.0	27.4	27.1	28.2	29.3	1.2	0.4	1.89	0.81	0.9	0.4	-0.03	-0.1	-0.1	0.0	0.1	0.1
APC 16JUL91:22:59	49.50	91.17	0	27.4	26.3	27.2	27.6	27.6	28.5	28.7	1.3	0.4	1.93	0.81	0.7	0.4	0.01	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:01	52.00	91.17	0	27.7	26.6	27.3	27.7	27.7	28.2	28.7	0.9	0.3	1.75	0.19	0.7	0.3	-0.04	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:03	54.50	91.17	0	27.6	26.9	27.3	27.6	27.5	27.9	28.3	0.6	0.2	1.45	0.29	-0.0	0.2	-0.00	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:05	57.00	91.17	0	27.7	27.1	27.4	27.7	27.6	28.2	28.5	0.8	0.2	1.64	0.46	-0.2	0.2	0.02	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:07	59.50	91.17	0	27.7	27.0	27.4	27.7	27.6	28.2	28.5	0.7	0.2	1.59	0.28	-0.2	0.2	0.02	-0.1	-0.0	0.0	0.0	0.1
APC 16JUL91:23:09	62.00	91.17	0	27.8	27.2	27.5	27.8	27.8	28.2	28.4	0.7	0.2	1.47	0.19	-0.4	0.2	0.04	-0.2	-0.0	0.0	0.1	0.1
APC 16JUL91:23:10	64.50	91.17	0	27.7	27.0	27.4	27.8	27.8	28.1	29.3	0.7	0.2	1.56	0.03	-0.3	0.2	0.07	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:12	67.00	91.17	0	27.8	27.1	27.3	27.8	27.9	28.1	28.6	0.8	0.3	1.65	-0.22	-1.0	0.2	0.05	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:14	69.50	91.17	0	27.6	26.8	27.2	27.6	27.6	28.0	30.1	0.7	0.2	1.55	0.59	6.9	0.2	0.05	-0.1	-0.0	0.0	0.1	0.1
APC 16JUL91:23:16	72.00	91.17	0	27.6	26.9	27.2	27.7	27.9	28.1	30.1	0.9	0.4	1.84	0.88	13.7	0.4	0.02	-0.2	-0.1	0.0	0.1	0.2
APC 16JUL91:23:18	74.50	91.17	0	27.6	26.9	27.2	27.7	27.9	28.1	29.3	0.9	0.4	1.79	-2.65	14.0	0.4	0.07	-0.2	-0.0	0.0	0.1	0.2
APC 16JUL91:23:20	77.00	91.17	0	27.8	26.9	27.4	27.9	27.9	28.2	28.3	0.7	0.3	1.64	-3.30	20.6	0.4	-0.05	-0.1	-0.0	0.0	0.1	0.2
APC 16JUL91:23:22	79.50	91.17	0	27.8	26.6	27.4	27.8	27.8	28.2	28.9	0.8	0.2	1.64	0.34	1.1	0.2	0.13	-0.1	-0.0	0.0	0.1	0.2
APC 16JUL91:23:24	82.00	91.17	0	27.9	26.5	27.3	27.9	27.9	28.4	28.9	1.3	0.4	1.91	0.22	1.0	0.3	0.15	-0.1	-0.0	0.0	0.1	0.2

UNIVERSITY : FAR-IR

SITE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	SLOPE (Degrees)	NOA	MEAN (Deg. C)	PERC. 95 (Deg. C)	MEDIAN (Deg. C)	MODE (Deg. C)	PERC. 95 (Deg. C)	MAXIMUM (Deg. C)	MIN. 90 (Deg. C)	ENTROPY (Dimensionless)	SKINNESS (Dimensionless)	CLUSTOSIS (Dimensionless)	CLUSTER (Deg. C)	REYNOLDS (Dimensionless)	CNT. 95 (Deg. C)	CNT. 95 (Deg. C)	CNT. 95 (Deg. C)	CNT. 95 (Deg. C)	CNT. 95 (Deg. C)	CNT. 95 (Deg. C)
APG	16JUL91:23:26	84.50	91.17	-	0	27.8	25.9	27.1	27.9	28.3	29.0	1.2	0.4	2.01	-0.64	2.4	0.4	-0.01	-0.3	-0.0	0.0	0.1	0.2
APG	16JUL91:23:28	87.06	91.17	-	0	27.7	26.8	27.3	27.6	27.5	28.2	0.9	0.3	1.74	0.67	0.5	0.3	0.05	-0.2	-0.0	0.0	0.1	0.1
APG	16JUL91:23:30	89.50	91.17	-	0	27.6	26.8	26.4	27.6	27.3	28.5	2.1	0.6	2.37	-1.14	2.4	0.6	0.03	-0.4	-0.1	0.0	0.1	0.2
APG	17JUL91:00:45	37.00	91.17	-	0	23.7	23.0	23.2	23.6	23.6	24.4	24.7	1.2	0.4	1.92	0.62	-0.9	0.4	-0.00	-0.1	-0.0	0.0	0.1
APG	17JUL91:00:47	39.50	91.17	-	0	23.8	23.0	23.5	23.7	23.6	24.5	25.2	1.1	0.4	1.69	0.74	-0.9	0.4	-0.06	-0.1	-0.0	0.0	0.1
APG	17JUL91:00:49	42.00	91.17	-	0	23.9	23.1	23.5	23.8	23.7	24.5	25.2	1.1	0.3	1.79	0.65	-0.5	0.3	0.01	-0.1	-0.0	0.0	0.1
APG	17JUL91:00:51	44.50	91.17	-	0	24.0	22.9	23.7	24.0	23.9	24.7	25.0	1.0	0.3	1.63	0.98	0.3	0.3	-0.03	-0.1	-0.0	0.0	0.1
APG	17JUL91:00:53	47.00	91.17	-	0	24.1	22.9	23.7	24.0	23.9	24.8	25.8	1.0	0.3	1.66	0.92	1.3	0.3	-0.11	0.1	-0.0	0.0	0.1
APG	17JUL91:00:55	49.50	91.17	-	0	24.3	22.9	23.9	24.2	24.1	25.0	25.9	1.1	0.3	1.73	0.68	1.6	0.3	-0.01	-0.1	-0.0	0.0	0.1
APG	17JUL91:00:57	52.00	91.17	-	0	24.3	23.2	23.9	24.2	24.2	24.6	26.4	0.7	0.2	1.51	0.99	4.8	0.2	-0.01	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:00	54.50	91.17	-	0	24.3	23.8	24.1	24.3	24.4	24.7	25.1	0.6	0.2	1.40	0.34	-0.1	0.2	-0.00	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:02	57.00	91.17	-	0	24.6	24.1	24.3	24.6	24.6	24.9	25.2	0.5	0.2	1.25	0.36	0.7	0.2	-0.02	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:04	59.50	91.17	-	0	25.1	24.6	24.9	25.1	25.0	25.4	25.7	0.5	0.2	1.16	0.67	0.7	0.1	0.04	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:06	62.00	91.17	-	0	25.1	24.5	24.8	25.1	25.0	25.4	25.9	0.7	0.2	1.44	0.13	0.3	0.2	0.14	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:08	64.50	91.17	-	0	25.3	24.7	24.9	25.3	25.4	25.6	26.1	0.7	0.2	1.48	-0.24	0.1	0.2	0.14	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:10	67.00	91.17	-	0	25.3	24.7	25.0	25.3	25.1	25.6	26.0	0.6	0.2	1.46	0.16	-0.5	0.2	-0.01	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:12	69.50	91.17	-	0	25.3	24.8	25.1	25.4	25.5	25.6	26.1	0.6	0.2	1.36	0.26	-0.1	0.2	0.06	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:15	72.00	91.17	-	0	25.0	22.7	24.6	25.0	25.1	25.3	27.2	0.8	0.3	1.69	0.46	11.9	0.3	0.03	-0.2	-0.1	0.0	0.1
APG	17JUL91:01:17	74.50	91.17	-	0	25.1	22.4	24.7	25.2	25.2	25.4	26.5	0.7	0.3	1.63	-3.24	18.6	0.3	0.06	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:19	77.00	91.17	-	0	25.1	22.4	24.7	25.2	25.2	25.4	25.7	0.7	0.3	1.55	-3.53	21.3	0.3	-0.05	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:21	79.50	91.17	-	0	25.2	24.4	24.8	25.3	25.4	25.6	26.2	0.7	0.2	1.60	-0.10	0.1	0.2	0.08	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:23	82.00	91.17	-	0	25.3	23.9	24.3	25.4	25.4	26.0	26.3	1.7	0.4	2.03	-1.02	1.4	0.3	0.24	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:25	84.50	91.17	-	0	25.3	23.1	24.2	25.5	25.6	25.9	26.4	1.7	0.5	2.11	-1.18	1.7	0.5	-0.01	-0.3	-0.1	0.0	0.1
APG	17JUL91:01:27	87.00	91.17	-	0	25.3	24.5	25.1	25.5	25.7	25.9	26.3	0.8	0.3	1.73	0.11	-0.6	0.2	0.12	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:30	89.50	91.17	-	0	25.7	22.7	24.3	25.8	25.3	26.6	26.9	2.3	0.7	2.38	-1.17	2.1	0.7	0.02	-0.5	-0.0	0.0	0.1
APG	17JUL91:01:33	91.17	91.17	-	0	22.3	21.7	21.9	22.1	22.0	23.1	23.7	1.2	0.4	1.78	1.03	-0.3	0.4	-0.07	-0.1	0.0	0.0	0.1
APG	17JUL91:01:35	93.50	91.17	-	0	22.3	21.5	21.8	22.2	22.0	23.2	24.3	1.3	0.4	1.92	0.84	-0.5	0.5	-0.07	-0.1	0.0	0.0	0.1
APG	17JUL91:01:36	94.50	91.17	-	0	22.4	21.6	22.0	22.4	22.4	23.1	23.8	1.1	0.3	1.79	0.69	-0.2	0.3	-0.02	-0.1	0.0	0.0	0.1
APG	17JUL91:01:38	97.00	91.17	-	0	22.7	21.6	22.4	22.7	22.7	23.4	24.1	1.0	0.3	1.61	0.89	2.0	0.3	-0.06	-0.1	0.0	0.0	0.1
APG	17JUL91:01:40	99.50	91.17	-	0	23.0	21.7	22.7	23.0	22.9	23.6	23.8	0.9	0.3	1.58	0.39	2.1	0.3	-0.02	-0.1	-0.0	0.0	0.1
APG	17JUL91:01:42	102.00	91.17	-	0	23.1	22.1	22.8	23.1	23.1	23.4	23.9	0.6	0.2	1.41	0.37	2.8	0.2	-0.02	-0.1	0.0	0.0	0.1
APG	17JUL91:01:45	104.50	91.17	-	0	23.2	22.8	23.1	23.2	23.2	23.5	23.8	0.4	0.1	1.18	0.33	-0.2	0.1	0.02	-0.1	0.0	0.0	0.1
APG	17JUL91:01:47	107.00	91.17	-	0	23.4	22.8	23.2	23.5	23.4	23.7	23.9	0.4	0.1	1.10	0.04	0.4	0.1	-0.01	-0.1	0.0	0.0	0.1
APG	17JUL91:01:49	109.50	91.17	-	0	23.5	22.8	23.3	23.5	23.5	23.7	23.9	0.4	0.1	1.03	-0.37	0.7	0.1	0.15	-0.1	0.0	0.0	0.1
APG	17JUL91:01:51	112.00	91.17	-	0	23.7	23.2	23.5	23.7	23.7	24.0	24.2	0.4	0.1	1.12	-0.07	0.4	0.1	0.13	-0.1	0.0	0.0	0.1
APG	17JUL91:01:53	114.50	91.17	-	0	23.7	23.1	23.4	23.7	23.7	24.0	25.2	0.6	0.2	1.36	-0.09	0.7	0.2	0.08	-0.1	0.0	0.0	0.1

SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BLOIN (Degrees)	MEAN (Deg.)	MINIMUM (Deg.)	PERC. OS (Deg.)	MIDIAN (Deg.)	MODE (Deg.)	PERC. 95 (Deg.)	MAXIMUM (Deg.)	HIG. 90 (Deg.)	ID (Deg.)	ENTROPY (Information Units)	RESEMBLES (Information Units)	KURTOSIS (Information Units)	CLUSTER (Deg.)	REYNOLDS (Information Units)	CRT. 05 (Deg.)	CRT. 25 (Deg.)	CRT. 50 (Deg.)	CRT. 75 (Deg.)	CRT. 95 (Deg.)	
APC	17 APR 91:03:25	67.80	91.17	-	0 23.9	23.3	23.5	23.9	24.0	24.2	25.1	0.7	0.2	1.48	-0.02	-0.6	0.2	-0.02	-0.1	0.0	0.0	0.0	0.1	0.1
APC	17 APR 91:03:27	69.50	91.17	-	0 24.0	23.3	23.7	24.0	23.9	24.6	24.6	0.6	0.2	1.47	-0.03	-0.6	0.2	0.04	-0.1	0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:03:30	72.00	91.17	-	0 24.2	22.8	23.7	24.2	24.4	24.6	24.8	0.9	0.3	1.80	0.71	9.7	0.3	0.04	-0.1	0.0	0.0	0.1	0.2	0.2
APC	17 APR 91:03:32	74.50	91.17	-	0 24.3	21.8	23.9	24.4	24.6	24.7	25.8	0.8	0.3	1.75	-2.28	11.6	0.3	0.05	-0.1	0.0	0.0	0.1	0.2	0.2
APC	17 APR 91:03:34	77.00	91.17	-	0 24.4	21.8	24.0	24.4	24.6	24.6	25.0	0.7	0.3	1.65	-2.62	15.1	0.3	0.05	-0.1	0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:03:36	79.50	91.17	-	0 24.4	23.5	24.1	24.5	24.6	24.8	27.0	0.7	0.3	1.62	0.24	2.1	0.2	0.14	-0.1	0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:03:38	82.00	91.17	-	0 24.5	23.8	23.4	24.6	24.5	25.1	25.7	1.7	0.4	2.00	-1.17	2.8	0.3	0.22	-0.1	-0.0	0.0	0.1	0.2	0.2
APC	17 APR 91:03:40	84.50	91.17	-	0 24.4	22.3	23.2	24.6	24.7	24.9	25.3	1.7	0.3	1.79	-1.42	2.3	0.5	0.02	-0.3	-0.0	0.0	0.1	0.2	0.2
APC	17 APR 91:03:42	87.00	91.17	-	0 24.4	23.4	24.0	24.5	24.8	24.9	25.5	0.9	0.3	1.79	-0.00	0.9	0.3	0.00	-0.2	-0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:03:45	89.50	91.17	-	0 24.5	21.8	23.3	24.4	24.2	25.6	25.8	2.3	0.7	2.36	-0.60	0.6	0.7	0.03	-0.4	-0.0	0.0	0.1	0.3	0.3
APC	17 APR 91:04:47	37.00	91.17	-	0 23.8	23.8	23.2	23.5	23.4	24.4	24.6	1.2	0.4	1.82	0.79	0.6	0.4	0.02	-0.1	-0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:04:47	39.50	91.17	-	0 23.6	23.1	23.4	23.7	23.5	24.5	25.3	1.1	0.3	1.83	0.49	-0.3	0.3	0.01	-0.1	-0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:04:49	42.00	91.17	-	0 23.9	23.0	23.4	23.9	23.8	24.5	25.4	1.1	0.3	1.83	0.49	-0.3	0.3	0.01	-0.1	-0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:04:51	44.50	91.17	-	0 24.0	23.1	23.7	24.0	23.9	24.6	25.2	0.9	0.3	1.60	0.74	0.3	0.3	0.05	-0.1	-0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:04:53	47.00	91.17	-	0 23.9	23.0	23.5	23.9	23.9	24.4	25.1	1.0	0.3	1.63	0.40	0.8	0.3	0.01	-0.2	-0.0	0.0	0.1	0.2	0.2
APC	17 APR 91:04:55	49.50	91.17	-	0 23.9	22.8	23.6	23.9	23.9	24.5	24.8	0.9	0.3	1.59	0.68	1.9	0.3	0.01	-0.1	-0.0	0.0	0.1	0.1	0.1
APC	17 APR 91:04:57	52.00	91.17	-	0 24.0	22.9	23.6	24.0	23.9	24.4	25.4	0.8	0.2	1.61	0.70	1.7								

		UNIVERSAL : FBI-18															
FILE	TIME	ADJUSTED HUMIDITY	RELATIVE HUMIDITY	WIND (deg/sec)	SEA (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)	WAVE (deg)
APR 15040971:08:49	300.33	90.75	26.63	1	8.1	6.5	7.5	8.0	7.7	9.0	10.4	1.7	0.6	2.36	0.32	-0.2	-0.0
APR 15040971:08:52	302.83	90.75	27.19	1	9.3	7.5	8.0	9.4	8.3	10.8	14.8	2.9	1.8	2.82	0.26	-0.4	0.1
APR 15040971:08:55	305.33	90.75	28.06	1	12.2	9.2	9.8	12.6	10.2	16.5	15.5	4.6	1.9	3.20	-0.09	-1.5	0.1
APR 15040971:08:58	307.83	90.75	29.00	1	11.8	9.8	10.7	11.8	10.9	13.3	16.2	2.6	1.0	2.77	0.31	-1.0	0.1
APR 15040971:09:01	310.33	90.75	30.04	1	13.3	8.8	11.1	13.7	14.4	15.1	16.1	4.0	1.5	3.13	-0.12	-1.0	0.1
APR 15040971:09:04	312.83	90.75	31.14	1	11.6	8.2	10.5	11.7	11.9	12.5	13.4	2.0	0.7	2.56	-0.68	0.8	0.1
APR 15040971:09:07	315.33	90.75	32.29	1	13.3	9.3	11.0	13.8	14.1	14.9	16.7	3.9	1.4	3.00	-0.74	-0.1	0.1
APR 15040971:09:10	317.83	90.75	33.50	1	11.8	8.5	10.3	12.0	10.8	13.4	16.3	3.0	1.1	2.90	-0.02	-1.0	0.1
APR 15040971:09:13	320.33	90.75	34.75	1	11.8	8.7	10.5	12.0	12.3	13.1	14.1	2.5	1.0	2.75	-0.18	-0.8	0.1
APR 15040971:09:16	322.83	90.75	36.03	1	12.6	7.7	10.6	12.9	13.5	14.6	16.2	4.0	1.6	3.20	-0.53	-0.1	0.1
APR 15040971:11:00	297.83	90.75	53.00	2	9.0	6.3	7.5	8.7	7.7	12.1	13.1	4.6	1.7	3.13	-0.06	-0.7	0.1
APR 15040971:11:03	300.33	90.75	52.53	2	10.3	7.9	8.5	10.5	10.7	12.0	13.8	3.5	1.2	3.01	-0.06	-0.7	0.1
APR 15040971:11:06	302.83	90.75	52.09	2	10.5	8.6	9.7	10.5	10.6	11.3	12.5	1.6	0.6	2.35	-0.08	0.0	0.1
APR 15040971:11:09	305.33	90.75	51.49	2	10.2	8.3	9.7	10.3	10.1	11.0	12.2	1.3	0.5	2.10	-0.27	1.0	0.1
APR 15040971:11:12	307.83	90.75	51.31	2	10.3	7.4	9.9	10.3	10.1	11.0	11.6	1.1	0.5	2.03	-0.30	2.7	0.1
APR 15040971:11:15	310.33	90.75	50.64	2	10.7	7.6	10.3	10.7	10.7	11.3	12.0	1.1	0.4	1.81	-0.31	1.2	0.1
APR 15040971:11:18	312.83	90.75	50.64	2	11.2	9.4	10.7	11.2	11.1	11.7	12.3	1.0	0.4	1.81	-0.31	1.2	0.1
APR 15040971:11:21	315.33	90.75	50.64	2	11.2	9.4	10.7	11.2	11.1	11.7	12.3	1.0	0.4	1.81	-0.31	1.2	0.1
APR 15040971:11:24	317.83	90.75	50.35	2	12.4	8.8	11.0	12.6	12.7	13.7	14.6	2.8	1.0	2.77	-0.35	-0.3	0.1
APR 15040971:11:27	320.33	90.75	50.08	2	13.7	8.6	11.4	13.8	13.9	15.3	17.0	3.9	1.3	3.09	-0.45	0.6	0.1
APR 15040971:11:30	322.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:33	325.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:36	327.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:39	330.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:42	332.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:45	335.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:48	337.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:51	340.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:54	342.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:11:57	345.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:00	347.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:03	350.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:06	352.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:09	355.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:12	357.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:15	360.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:18	362.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:21	365.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:24	367.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:27	370.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:30	372.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:33	375.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:36	377.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:39	380.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:42	382.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:45	385.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:48	387.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:51	390.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:54	392.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:12:57	395.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:00	397.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:03	400.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:06	402.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:09	405.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:12	407.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:15	410.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:18	412.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:21	415.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:24	417.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:27	420.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:30	422.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:33	425.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:36	427.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:39	430.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:42	432.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:45	435.33	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:48	437.83	90.75	49.83	2	13.3	8.7	11.3	13.4	11.9	15.7	17.4	4.4	1.8	3.33	-0.12	-0.7	0.1
APR 15040971:13:51	440.33	90.75	49.83	2	13.3</												

UNIVERSITY OF ILLINOIS - SPRINGFIELD[illegible]

LAURENCE : FAR-IR																							
TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BLIND (Degrees)	MDA	MEAN (Deg.)	MINIMUM (Deg.)	PERCENT (Deg.)	MEDIAN (Deg.)	MODE (Deg.)	PERCENT (Deg.)	MAXIMUM (Deg.)	ANGLE (Deg.)	RETRAY (Deg.)	STRENGTH (Deg.)	RM (Degrees)	CLUTTER (Deg.)	REYNOLDS (Deg.)	CR105 (Deg.)	CR125 (Deg.)	CR150 (Deg.)	CR175 (Deg.)	CR195 (Deg.)	
APR 15MAR91:21:16	320.33	90.75	-	0	9.0	6.7	8.5	8.9	8.9	10.1	11.0	1.8	0.6	2.28	0.61	1.8	0.7	-0.17	-0.2	-0.1	0.0	0.1	0.3
APR 15MAR91:21:19	322.83	90.75	-	0	9.5	7.2	8.5	9.3	8.9	10.9	11.6	2.6	0.9	2.59	0.46	-1.0	0.7	0.21	-0.2	-0.1	0.0	0.1	0.4
APR 15MAR91:22:49	297.83	90.75	-	0	2.1	-0.5	0.1	1.4	0.5	4.8	5.4	4.8	1.9	3.08	0.46	-1.6	1.8	0.03	-0.5	-0.2	0.0	0.2	0.4
APR 15MAR91:22:52	300.33	90.75	-	0	2.4	-0.6	0.1	1.7	1.1	5.2	5.9	5.1	2.8	3.13	0.36	-1.5	2.0	0.00	-0.4	-0.2	0.0	0.2	0.4
APR 15MAR91:22:55	302.83	90.75	-	0	2.8	0.5	1.0	2.0	1.6	5.5	6.2	4.5	1.8	2.87	0.66	-1.3	1.9	0.07	-0.4	-0.2	0.0	0.2	0.4
APR 15MAR91:22:58	305.33	90.75	-	0	3.0	0.6	1.3	2.4	1.4	5.9	6.5	4.7	1.8	2.97	0.79	-0.9	1.8	-0.03	-0.4	-0.2	0.0	0.1	0.4
APR 15MAR91:23:01	307.83	90.75	-	0	2.9	0.1	1.0	2.3	1.1	6.1	6.7	5.1	1.8	3.13	0.79	-0.8	1.8	0.04	-0.5	-0.2	0.0	0.2	0.4
APR 15MAR91:23:04	310.33	90.75	-	0	3.3	0.4	1.3	2.5	1.7	6.5	7.3	5.2	1.8	3.16	0.81	-0.7	1.8	0.01	-0.5	-0.3	0.0	0.2	0.6
APR 15MAR91:23:07	312.83	90.75	-	0	3.5	0.8	1.5	3.0	2.9	6.8	7.6	5.4	1.8	3.21	0.85	-0.5	1.8	0.01	-0.5	-0.2	0.0	0.2	0.5
APR 15MAR91:23:10	315.33	90.75	-	0	3.5	0.5	1.7	3.0	2.3	6.8	7.5	5.1	1.7	3.15	0.99	-0.1	1.8	-0.04	-0.4	-0.2	0.0	0.2	0.4
APR 15MAR91:23:13	317.83	90.75	-	0	3.9	1.3	2.4	3.6	3.1	7.0	8.6	4.7	1.5	3.09	1.20	0.9	1.5	-0.97	-0.3	-0.1	0.0	0.2	0.4
APR 15MAR91:23:16	320.33	90.75	-	0	4.8	2.4	3.3	4.6	3.8	7.7	8.6	4.6	1.3	3.06	1.04	0.6	1.3	0.01	-0.3	-0.1	0.0	0.2	0.5
APR 15MAR91:23:19	322.83	90.75	-	0	5.5	2.6	3.6	5.5	4.5	8.4	9.1	4.8	1.7	3.27	0.25	-1.3	1.3	0.29	-0.4	-0.1	0.1	0.2	0.5
APR 15MAR91:00:49	297.83	90.75	-	0	1.7	-0.3	0.6	1.4	1.2	3.2	3.7	2.6	1.0	2.62	0.65	-1.2	1.1	-0.08	-0.3	-0.1	0.0	0.1	0.3
APR 15MAR91:00:53	300.33	90.75	-	0	2.2	0.1	0.9	1.8	1.4	4.2	4.9	3.3	1.2	2.85	0.56	-1.1	1.2	0.06	-0.4	-0.1	0.0	0.1	0.4
APR 15MAR91:01:00	305.33	90.75	-	0	2.3	0.2	1.0	1.8	1.5	4.2	4.8	3.3	1.3	2.75	0.63	-1.1	1.3	-0.10	-0.4	-0.1	0.0	0.2	0.3
APR 15MAR91:01:03	307.83	90.75	-	0	2.3	0.3	1.0	2.1	1.6	4.3	5.2	3.3	1.2	2.83	0.67	-0.8	1.2	0.01	-0.5	-0.2	0.0	0.2	0.4
APR 15MAR91:01:06	307.83	90.75	-	0	2.8	-0.2	1.7	2.5	2.3	4.7	5.6	3.0	1.1	2.74	0.80	-0.4	1.2	-0.12	-0.4	-0.2	0.0	0.2	

D21

[illegible]

UNVEILED : FAR-12

TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BDR (Degrees)	BOA	MEAN (Deg. C)	MINIMUM (Deg. C)	PERC. 05 (Deg. C)	MEDIAN (Deg. C)	MODE (Deg. C)	PERC. 95 (Deg. C)	MAXIMUM (Deg. C)	RNO. 90 (Deg. C)	SD (Deg. C)	ENTROPY (Differential Entropy)	SKELNESS (Differential Entropy)	KURTOSIS (Differential Entropy)	CLUTTER (Deg. C)	REYNOLDS (Differential Entropy)	CNT. 05 (Deg. C)	CNT. 25 (Deg. C)	CNT. 50 (Deg. C)	CNT. 75 (Deg. C)	CNT. 95 (Deg. C)
APN 20JAN91:13:22	322.83	90.75	76.35	2	40.4	37.9	38.6	40.3	39.3	42.9	46.8	4.2	1.4	3.20	0.83	1.3	1.7	-0.25	-0.7	-0.2	0.0	0.3	0.9
APN 20JAN91:14:48	297.83	90.75	99.69	3	39.4	37.2	37.8	39.8	40.0	40.8	42.7	2.9	1.1	2.84	-0.22	-0.7	1.1	0.83	-0.3	0.0	0.1	0.2	0.5
APN 20JAN91:14:49	300.33	90.75	99.09	3	39.8	37.6	38.2	39.9	38.4	42.4	44.9	4.2	1.5	3.10	0.93	0.9	1.2	0.16	-0.2	-0.1	0.1	0.2	0.8
APN 20JAN91:14:52	302.83	90.75	98.45	3	40.6	37.8	38.5	40.2	38.7	44.6	47.1	6.1	2.1	3.40	0.89	-0.0	1.9	0.11	-0.5	-0.1	0.1	0.5	2.0
APN 20JAN91:14:54	305.33	90.75	97.80	3	40.7	38.0	38.5	40.5	38.6	43.9	47.4	5.4	1.8	3.41	0.76	0.2	1.7	0.09	-0.4	-0.1	0.1	0.3	0.8
APN 20JAN91:14:55	307.83	90.75	97.11	3	40.4	38.1	38.6	40.3	38.7	43.1	46.3	4.5	1.5	3.21	0.69	0.2	0.8	0.46	-0.8	-0.2	0.1	0.2	1.1
APN 20JAN91:14:58	310.33	90.75	96.38	3	40.8	38.1	38.8	40.9	38.9	42.7	45.3	3.5	1.4	3.14	0.83	-0.4	1.5	-0.07	-0.5	-0.1	0.1	0.2	0.7
APN 20JAN91:15:00	312.83	90.75	95.63	3	40.9	38.4	39.0	41.2	41.5	42.6	44.3	3.6	1.3	3.00	-0.32	-0.7	1.3	-0.83	-0.2	0.0	0.1	0.2	0.5
APN 20JAN91:15:01	315.33	90.75	94.86	3	41.0	38.5	39.2	41.2	40.9	42.5	45.2	3.3	1.1	2.86	-0.24	-0.1	1.2	-0.07	-0.4	-0.1	0.1	0.2	0.5
APN 20JAN91:15:04	317.83	90.75	94.05	3	41.2	38.5	39.4	41.6	41.4	42.6	48.1	3.2	1.1	2.87	0.96	6.4	1.0	0.15	-0.3	-0.1	0.1	0.2	0.5
APN 20JAN91:15:06	320.33	90.75	93.21	3	42.3	39.6	40.0	42.3	42.1	44.3	50.4	4.3	1.3	3.16	1.55	7.4	2.2	-0.38	-0.7	-0.2	0.1	0.2	1.3
APN 20JAN91:15:07	322.83	90.75	92.35	3	41.6	39.1	39.9	41.7	40.7	43.7	48.5	3.8	1.3	3.13	0.72	1.6	1.6	-0.22	-0.8	-0.2	0.1	0.3	0.9
APN 20JAN91:16:46	297.83	90.75	127.14	3	40.1	38.4	38.9	40.3	-0.9	41.1	42.0	2.2	0.8	2.58	-0.22	-1.3	0.8	0.06	-0.2	-0.0	0.1	0.2	0.4
APN 20JAN91:16:49	300.33	90.75	126.23	3	40.7	38.6	39.5	40.7	39.7	42.4	44.6	2.9	1.0	2.78	0.82	0.7	0.8	0.21	-0.3	-0.1	0.0	0.2	0.5
APN 20JAN91:16:51	302.83	90.75	125.27	3	41.4	39.6	39.9	41.2	40.8	44.6	46.3	4.7	1.6	3.12	0.85	-0.2	1.5	0.13	-0.3	0.0	0.1	0.4	1.5
APN 20JAN91:16:53	305.33	90.75	124.26	3	41.7	39.7	40.1	41.8	40.2	43.9	46.1	3.8	1.4	3.03	0.44	-0.2	1.2	0.07	-0.2	0.0	0.1	0.2	0.5
APN 20JAN91:16:55	307.83	90.75	123.14	3	41.4	39.4	40.0	41.6	40.1	43.4	44.9	3.4	1.1	2.92	0.23	-0.6	0.9	0.32	-0.6	-0.1	0.1	0.2	0.7
APN 20JAN91:16:5	310.33	90.75	121.98	3	41.5	39.5	40.0	41.8	41.8	43.1	44.2	3.1	1.0	2.86	-0.22	-0.6	1.2	-0.10	-0.3	-0.1	0.1	0.2	0.6
APN 20JAN91:16:59	312.83	90.75	121.00	3	41.6	39.9	40.2	41.8	41.8	42.8	43.9	2.7	0.9	2.65	-0.31	-0.5	0.9	-0.03	-0.2	0.0	0.1	0.2	0.4
APN 20JAN91:17:01	315.33	90.75	119.73	3	41.6	39.9	40.4	41.8	41.9	42.8	43.9	2.4	0.8	2.57	-0.20	-0.4	0.8	-0.04	-0.4	-0.1	0.1	0.2	0.6
APN 20JAN91:17:03	317.83	90.75	118.43	3	41.8	39.7	40.6	41.9	42.0	42.9	47.0	2.3	0.8	2.61	1.39	7.8	0.6	0.22	-0.3	-0.1	0.1	0.2	0.4
APN 20JAN91:17:05	320.33	90.75	117.07	3	42.2	40.1	41.0	42.2	42.1	43.7	48.4	2.7	1.1	2.78	2.46	11.1	1.5	-0.38	-0.5	-0.2	0.0	0.2	0.9
APN 20JAN91:17:07	322.83	90.75	115.67	3	42.0	39.2	40.5	42.1	42.5	43.4	46.8	2.9	1.0	2.87	0.35	1.7	1.0	-0.08	-0.6	-0.2	0.1	0.3	0.7
APN 20JAN91:18:49	297.83	90.75	156.42	4	33.6	33.1	33.4	33.7	33.6	33.9	35.3	0.6	0.2	1.32	1.04	8.2	0.2	-0.03	-0.0	0.0	0.0	0.1	0.3
APN 20JAN91:18:52	300.33	90.75	155.27	6	33.8	33.0	33.5	33.8	33.7	34.7	36.3	1.1	0.4	1.57	3.01	10.7	0.3	0.35	-0.1	0.0	0.0	0.1	0.9
APN 20JAN91:18:54	302.83	90.75	154.22	4	34.3	33.4	33.8	34.1	34.1	35.8	36.5	2.0	0.6	1.97	2.89	3.9	0.5	0.19	-0.2	-0.0	0.0	0.1	0.9
APN 20JAN91:18:56	305.33	90.75	152.81	4	34.0	33.4	33.7	34.0	33.9	34.7	36.1	0.9	0.4	1.45	3.40	13.6	0.2	0.45	-0.1	0.0	0.0	0.1	0.2
APN 20JAN91:18:59	307.83	90.75	151.29	4	34.1	33.5	33.9	34.1	34.1	34.5	35.3	0.6	0.2	1.24	1.73	5.8	0.2	0.20	-0.2	-0.0	0.0	0.1	0.2
APN 20JAN91:19:01	310.33	90.75	149.69	4	34.2	33.8	34.0	34.2	34.2	34.6	35.0	0.6	0.2	1.18	0.81	0.9	0.1	-0.05	-0.1	0.0	0.0	0.1	0.2
APN 20JAN91:19:03	312.83	90.75	148.23	4	34.4	34.1	34.3	34.5	34.4	34.7	35.2	0.4	0.1	0.98	0.88	1.9	0.1	-0.01	-0.0	0.0	0.0	0.0	0.1
APN 20JAN91:19:06	315.33	90.75	146.48	4	34.6	34.1	34.6	34.6	34.6	34.8	35.7	0.4	0.2	1.14	0.90	4.5	0.1	0.15	-0.1	0.0	0.0	0.1	0.1
APN 20JAN91:19:08	317.83	90.75	144.67	4	34.8	34.3	34.6	34.9	34.9	35.2	35.6	0.6	0.3	1.46	1.46	6.2	0.2	0.44	-0.1	0.0	0.0	0.1	0.1
APN 20JAN91:19:10	320.33	90.75	143.02	4	35.1	34.4	34.7	35.1	35.1	35.5	35.7	0.8	0.6	1.76	5.08	32.7	0.8	-0.33	-0.6	-0.0	0.0	0.0	0.7
APN 20JAN91:19:13	322.83	90.75	141.13	4	35.2	34.5	34.8	35.2	35.3	35.6	36.6	1.0	0.3	1.85	0.16	1.4	0.2	0.33	-0.2	-0.0	0.0	0.1	0.2
APN 20JAN91:20:45	297.83	90.75	0	28.7	27.2	27.7	28.5	28.3	30.3	30.6	32.6	2.6	0.8	2.54	0.80	-0.2	0.8	-0.06	-0.3	-0.1	0.0	0.1	0.2
APN 20JAN91:20:47	300.33	90.75	0	29.1	27.3	28.1	28.9	28.8	30.6	30.9	32.9	2.5	0.8	2.59	0.65	-0.5	0.8	0.01	-0.2	-0.1	0.0	0.1	0.2
APN 20JAN91:20:53	307.83	90.75	0	29.4	27.7	28.3	29.3	29.0	31.0	31.3	33.3	2.7	0.8	2.67	0.58	-0.3	0.7	0.11	-0.2	-0.1	0.0	0.1	0.2

WAVEBAND : FAR-IR																										
SITE	TIME	AZIMUTH (Degree)	ELEVATION (Degree)	BOLN (Degree)	RAJ (Deg.)	RAJMIN (Deg.)	RAJMAX (Deg.)	DEC (Deg.)	DECMIN (Deg.)	DECIMAX (Deg.)	RAJ (Deg.)	RAJMIN (Deg.)	RAJMAX (Deg.)	DEC (Deg.)	DECMIN (Deg.)	DECIMAX (Deg.)	RAJ (Deg.)	RAJMIN (Deg.)	RAJMAX (Deg.)	DEC (Deg.)	DECMIN (Deg.)	DECIMAX (Deg.)	RAJ (Deg.)	RAJMIN (Deg.)	RAJMAX (Deg.)	DEC (Deg.)
APN	21JUL91:04:46	300.33	90.75	-	0	23.5	22.9	23.1	23.5	23.5	24.1	24.4	1.0	0.3	1.72	0.78	0.0	0.3	0.07	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:04:49	302.83	90.75	-	0	23.9	23.2	23.5	23.9	23.8	24.4	24.6	0.9	0.2	1.60	0.55	0.1	0.2	0.02	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:04:51	305.33	90.75	-	0	23.5	22.6	23.0	23.6	23.6	24.2	24.4	1.2	0.3	1.88	0.03	0.1	0.2	0.21	-0.2	-0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:04:54	307.83	90.75	-	0	24.3	23.2	23.8	24.4	24.3	25.0	25.4	1.2	0.3	1.94	0.04	0.1	0.3	0.18	-0.2	-0.0	0.0	0.1	0.2	0.2	0.2
APN	21JUL91:04:56	310.33	90.75	-	0	24.6	23.6	24.2	24.8	24.7	25.2	25.4	1.0	0.3	1.89	0.13	-0.7	0.3	0.16	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:04:58	312.83	90.75	-	0	24.8	23.9	24.3	24.8	25.0	25.5	25.8	1.3	0.4	2.00	0.41	-0.4	0.3	0.12	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:05:01	315.33	90.75	-	0	25.3	24.3	24.7	25.3	25.1	26.1	26.4	1.5	0.4	2.15	0.24	-0.8	0.4	0.09	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:05:04	317.83	90.75	-	0	25.7	24.6	25.1	25.6	25.4	26.5	27.5	1.4	0.4	2.15	0.50	-0.4	0.4	0.13	-0.1	0.0	0.0	0.0	0.1	0.1	0.1
APN	21JUL91:05:06	320.33	90.75	-	0	25.6	24.4	24.8	25.5	25.6	26.4	27.8	1.6	0.5	2.26	0.55	0.7	0.4	0.27	-0.1	0.0	0.0	0.1	0.3	0.3	0.3
APN	21JUL91:05:09	322.83	90.75	-	0	26.0	24.4	25.1	26.1	26.3	26.8	27.6	1.7	0.5	2.37	-0.36	-0.4	0.4	0.32	-0.1	0.0	0.0	0.1	0.2	0.2	0.2
APN	21JUL91:06:45	297.83	90.75	49.29	2	22.8	22.2	22.4	22.7	22.6	23.5	23.9	1.1	0.3	1.68	1.14	0.9	0.3	0.03	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:06:47	300.33	90.75	51.35	2	24.0	23.4	23.6	24.0	23.9	24.7	25.2	1.1	0.3	1.85	0.96	0.5	0.3	-0.02	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:06:49	302.83	90.75	53.54	2	23.7	23.0	23.3	23.7	23.7	24.3	24.7	1.0	0.3	1.86	0.43	-0.1	0.3	0.04	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:06:52	305.33	90.75	55.60	2	24.0	23.4	23.7	24.0	23.9	24.6	25.1	1.0	0.3	1.69	0.69	0.1	0.3	0.00	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:06:55	307.83	90.75	57.80	2	24.5	23.9	24.1	24.5	24.3	25.0	25.4	0.9	0.2	1.67	0.51	-0.0	0.3	-0.00	-0.1	0.0	0.0	0.1	0.2	0.2	0.2
APN	21JUL91:06:57	310.33	90.75	59.99	2	24.8	24.3	24.5	24.8	24.7	25.4	25.7	0.9	0.2	1.58	0.78	0.1	0.3	-0.00	-0.1	0.0	0.0	0.1	0.2	0.2	0.2
APN	21JUL91:07:00	312.83	90.75	62.03	2	25.0	24.5	24.7	25.0	24.9	25.5	25.9	0.8	0.2	1.53	0.80	0.5	0.3	-0.10	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:07:02	315.33	90.75	64.08	2	25.2	24.7	24.9	25.2	25.2	25.6	26.0	0.8	0.2	1.47	0.55	0.6	0.2	-0.08	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:07:04	317.83	90.75	66.27	2	25.5	24.9	25.1	25.5	25.4	25.9	27.5	0.8	0.2	1.59	1.36	6.5	0.2	0.03	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
APN	21JUL91:07:07	320.33	90.75	68.30	2	25.6	25.0	25.3	25.5	25.5	26.1	27.9	0.8	0.3	1.54	3.03	15.3	0.2	0.20	-0.1	0.0	0.0	0.1	0.3	0.3	0.3
APN	21JUL91:07:10	322.83	90.75	70.47	2	25.9	25.2	25.5	25.9	25.9	26.5	27.4	0.9	0.3	1.72	0.79	0.7	0.3	-0.12	-0.1	0.0	0.0	0.1	0.1	0.1	0.1
EGL	10AUG91:06:06	95.00	91.50	-	0	23.6	23.6	23.6	23.6	23.6	23.7	23.7	0.1	0.0	0.43	0.02	-0.4	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:07	97.50	91.50	-	0	23.6	23.6	23.6	23.6	23.6	23.7	23.7	0.1	0.0	0.50	-0.09	-0.3	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:08	100.00	91.50	-	0	23.7	23.6	23.6	23.7	23.6	23.7	23.7	0.1	0.0	0.60	0.26	-0.1	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:10	102.50	91.50	-	0	23.7	23.6	23.6	23.7	23.7	23.7	23.8	0.1	0.0	0.62	0.04	0.7	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:11	105.00	91.50	-	0	23.7	23.5	23.6	23.7	23.7	23.7	23.8	0.1	0.0	0.62	0.04	0.7	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:12	107.50	91.50	143.91	4	23.7	23.6	23.6	23.7	23.7	23.7	23.8	0.1	0.0	0.50	0.64	0.3	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:14	110.00	91.50	141.53	4	23.7	23.6	23.7	23.7	23.7	23.8	23.8	0.1	0.0	0.17	0.22	0.4	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:15	112.50	91.50	139.28	4	23.7	23.6	23.7	23.7	23.7	23.8	23.8	0.1	0.0	0.22	0.41	-0.1	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:16	115.00	91.50	136.91	4	23.7	23.7	23.7	23.7	23.7	23.8	23.8	0.1	0.0	0.00	0.67	0.4	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:18	117.50	91.50	134.53	3	23.7	23.6	23.7	23.7	23.7	23.8	23.8	0.1	0.0	0.30	0.48	-0.1	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:19	120.00	91.50	132.27	3	23.8	23.7	23.7	23.8	23.8	23.8	23.9	0.1	0.0	0.19	0.65	0.3	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:21	122.50	91.50	129.89	3	23.8	23.7	23.7	23.8	23.8	23.9	23.9	0.1	0.0	0.16	0.20	0.2	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:22	125.00	91.50	127.51	3	23.8	23.7	23.7	23.8	23.8	23.9	23.9	0.1	0.0	0.69	-0.53	1.4	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:23	127.50	91.50	125.26	3	23.8	23.7	23.8	23.9	23.9	23.9	24.0	0.1	0.0	0.08	0.57	0.2	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:25	130.00	91.50	122.88	3	23.9	23.8	23.9	23.9	23.9	24.0	24.0	0.1	0.0	0.00	0.33	-0.1	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EGL	10AUG91:06:26	132.50	91.50	120.62	3	23.9	23.9	23.9	24.0	24.0	24.0	24.0	0.1	0.0	0.00	0.33	-0.1	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Time		Altitude (Degrees)	Elevation (Degrees)	BoA	Mean	Minimum	Maximum	PERC. 95	Median	Mode	PERC. 90	SD	Skewness (Distributions)	Kurtosis (Distributions)	Clutter (Distributions)	Reflections (Distributions)	CNT. 05	CNT. 25	CNT. 50	CNT. 75	CNT. 95	
EQ	10:00:01:04:27	135.00	91.50	116.24	3	24.0	23.9	24.0	24.0	24.0	24.0	0.1	0.0	0.09	0.51	0.0	0.44	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:04:29	137.50	91.50	115.86	3	24.0	24.0	24.0	24.1	24.0	24.1	0.1	0.0	0.68	0.24	0.0	0.28	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:04:30	140.00	91.50	115.61	3	24.1	24.0	24.1	24.1	24.1	24.2	0.1	0.0	0.05	0.05	0.2	0.31	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:04:31	142.50	91.50	111.23	3	24.1	24.0	24.1	24.2	24.1	24.2	0.1	0.0	0.02	0.11	0.9	0.37	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:33	95.00	91.50	157.35	4	27.4	27.2	27.3	27.5	27.4	27.7	0.3	0.1	0.72	0.22	0.6	0.48	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:35	97.50	91.50	155.57	4	27.7	27.6	27.7	27.8	27.7	27.8	0.1	0.0	0.05	0.35	0.5	0.57	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:38	100.00	91.50	153.81	4	27.9	27.8	27.8	27.9	27.9	28.0	0.1	0.0	0.57	0.24	0.2	0.36	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:40	102.50	91.50	151.92	4	28.0	27.9	28.0	28.0	28.0	28.1	0.1	0.0	0.13	0.62	1.7	0.49	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:43	105.00	91.50	150.05	4	28.1	27.9	28.1	28.1	28.1	28.2	0.1	0.0	0.28	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:45	107.50	91.50	148.09	4	28.2	28.0	28.1	28.2	28.2	28.3	0.1	0.0	0.42	0.25	0.7	0.1	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:48	110.00	91.50	144.16	4	28.3	28.0	28.2	28.3	28.3	28.4	0.2	0.1	0.59	0.33	0.1	0.15	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:51	112.50	91.50	140.13	4	28.3	28.2	28.3	28.3	28.3	28.4	0.2	0.0	0.21	0.78	0.4	0.52	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:53	115.00	91.50	142.15	4	28.3	28.1	28.2	28.3	28.3	28.6	0.3	0.1	0.71	0.13	1.1	0.62	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:56	117.50	91.50	140.15	4	28.3	28.3	28.5	28.5	28.5	28.7	0.2	0.0	0.25	0.70	0.0	0.61	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:58	120.00	91.50	136.13	4	28.6	28.5	28.6	28.6	28.6	28.7	0.2	0.0	0.36	0.96	1.1	0.48	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:07:59	122.50	91.50	134.11	4	28.6	28.5	28.6	28.6	28.6	28.7	0.1	0.0	0.47	0.74	0.7	0.42	0.0	0.0	0.0	0.0	0.0
EQ	10:00:01:08:01	125.00	91.50	132.05																		

		UNVEILED : FAR-IR															
SITE	TIME	AZIMUTH (deg.)	ELEVATION (deg.)	BDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)	RDR (deg.)
EGL	10AUG91:14:05	125.00	91.50	82.67	2	34.1	35.6	35.8	36.1	35.9	37.0	37.6	1.2	0.3	1.64	1.78	3.0
EGL	10AUG91:14:07	127.50	91.50	82.99	2	34.8	35.8	35.9	36.0	35.9	36.2	36.5	0.3	0.1	0.64	1.80	5.1
EGL	10AUG91:14:10	130.00	91.50	83.55	2	35.9	35.5	35.7	36.0	35.8	36.3	36.9	0.6	0.1	0.51	0.6	0.1
EGL	10AUG91:14:12	132.50	91.50	83.96	2	36.1	35.8	35.9	36.1	36.0	36.3	36.6	0.3	0.1	0.83	0.13	0.0
EGL	10AUG91:14:15	135.00	91.50	84.50	2	36.8	35.4	35.6	36.1	36.0	36.5	36.8	0.9	0.2	1.64	-0.30	-0.6
EGL	10AUG91:14:17	137.50	91.50	85.06	2	36.8	35.4	35.6	36.0	35.7	36.6	37.0	1.0	0.3	1.82	0.53	-0.7
EGL	10AUG91:14:20	140.00	91.50	85.75	2	36.2	35.7	35.9	36.2	36.2	36.5	36.7	0.6	0.2	1.36	-0.39	-0.6
EGL	10AUG91:14:22	142.50	91.50	86.30	2	36.1	35.5	35.7	36.2	36.2	36.5	36.8	0.6	0.2	1.56	-0.32	-0.9
EGL	10AUG91:15:43	95.00	91.50	48.86	2	33.5	33.2	33.4	33.6	33.5	33.9	34.2	0.5	0.2	1.28	0.72	0.7
EGL	10AUG91:15:46	97.50	91.50	48.82	2	33.4	33.3	33.5	33.7	33.6	33.9	34.4	0.4	0.2	1.16	0.76	0.4
EGL	10AUG91:15:49	100.00	91.50	48.62	2	33.8	33.5	33.7	33.9	33.9	34.2	34.5	0.4	0.2	1.29	0.21	-0.1
EGL	10AUG91:15:53	102.50	91.50	48.74	2	33.7	33.7	33.5	33.8	34.1	34.4	34.5	1.4	0.4	2.08	-0.30	-1.1
EGL	10AUG91:15:56	105.00	91.50	48.94	2	33.8	33.5	33.7	33.8	33.7	34.1	34.2	0.3	0.1	0.91	0.94	1.3
EGL	10AUG91:15:59	107.50	91.50	48.98	2	33.9	33.6	33.8	33.9	33.8	34.1	34.1	0.3	0.1	0.72	0.81	0.5
EGL	10AUG91:16:03	110.00	91.50	49.34	2	33.7	33.5	33.6	33.7	33.7	33.9	33.9	0.3	0.1	0.76	0.31	-0.6
EGL	10AUG91:16:06	112.50	91.50	49.81	2	33.4	33.1	33.2	33.4	33.3	33.6	33.7	0.3	0.1	0.81	0.27	-0.2
EGL	10AUG91:16:09	115.00	91.50	50.13	2	32.4	32.4	32.5	32.6	32.5	32.8	32.9	0.3	0.1	0.67	0.50	-0.3
EGL	10AUG91:16:13	117.50	91.50	50.76	2	31.2	31.0	31.1	31.3	31.3	31.5	31.5	0.2	0.1	0.72	-0.50	-0.4
EGL	10AUG91:16:16	120.00	91.50	51.24	2	29.9	29.7	29.8	30.0	30.0	30.1	30.2	0.2	0.1	0.58	-0.51	-0.4
EGL	10AUG91:16:19	122.50	91.50	52.03	2	28.4	28.4	28.5	28.6	28.5	28.8	29.2	0.3	0.1	0.85	2.27	6.2
EGL	10AUG91:16:23	125.00	91.50	52.91	2	27.4	27.5	27.5	27.6	27.6	28.0	28.4	0.5	0.1	0.87	1.98	3.9
EGL	10AUG91:16:26	127.50	91.50	53.64	2	27.8	27.6	27.7	27.8	27.7	27.9	28.2	0.2	0.1	0.56	1.95	5.2
EGL	10AUG91:16:30	130.00	91.50	54.67	2	26.0	27.7	27.8	28.0	28.0	28.2	28.6	0.4	0.1	0.84	1.11	2.7
EGL	10AUG91:17:37	95.00	91.50	22.19	1	29.0	28.9	29.0	29.0	29.0	29.1	29.1	0.1	0.0	0.34	0.71	0.4
EGL	10AUG91:17:39	97.50	91.50	21.70	1	29.0	28.9	28.9	29.0	29.0	29.1	29.1	0.1	0.0	0.11	0.05	-0.4
EGL	10AUG91:17:42	100.00	91.50	21.64	1	29.0	29.0	29.0	29.1	29.0	29.1	29.2	0.1	0.0	0.69	0.56	-0.2
EGL	10AUG91:17:44	102.50	91.50	21.58	1	29.0	28.9	29.0	29.0	29.0	29.1	29.2	0.1	0.0	0.57	0.51	0.0
EGL	10AUG91:17:47	105.00	91.50	21.98	1	29.1	29.0	29.0	29.1	29.1	29.1	29.2	0.1	0.0	0.42	0.41	-0.2
EGL	10AUG91:17:52	110.00	91.50	22.36	1	29.1	29.0	29.1	29.1	29.1	29.2	29.2	0.1	0.0	0.20	0.41	-0.5
EGL	10AUG91:17:55	112.50	91.50	23.95	1	29.1	29.0	29.0	29.1	29.1	29.1	29.2	0.1	0.0	0.01	0.22	-0.0
EGL	10AUG91:17:57	115.00	91.50	24.90	1	29.0	28.9	29.0	29.0	29.0	29.1	29.1	0.1	0.0	0.45	0.44	-0.1
EGL	10AUG91:18:00	117.50	91.50	26.23	1	28.9	28.9	28.9	29.0	28.9	29.0	29.0	0.1	0.0	0.00	0.59	-0.1
EGL	10AUG91:18:02	120.00	91.50	27.46	1	28.9	28.8	28.8	28.9	28.9	28.9	29.0	0.1	0.0	0.45	0.73	0.5
EGL	10AUG91:18:05	122.50	91.50	29.03	1	28.8	28.7	28.8	28.8	28.8	28.9	29.0	0.1	0.0	0.46	1.39	2.9
EGL	10AUG91:18:07	125.00	91.50	30.49	1	28.8	28.6	28.7	28.8	28.7	28.8	28.9	0.1	0.0	0.12	0.80	0.7
EGL	10AUG91:18:10	127.50	91.50	32.03	1	28.7	28.6	28.7	28.7	28.7	28.8	29.0	0.1	0.0	0.23	1.01	4.0
EGL	10AUG91:18:10	127.50	91.50	32.03	1	28.7	28.6	28.7	28.7	28.7	28.8	29.0	0.1	0.0	0.23	1.01	4.0

WAVEBAND : FAR-IR																								
SITE	TIME	ELEVATION (Degrees)	BIDIR (Degrees)	SEA (Degrees)	MINIMUM (Degrees)	PERC. (Degrees)	MEDIAN (Degrees)	MODE (Degrees)	MAXIMUM (Degrees)	RNC.70 (Degrees)	SEA (Degrees)	ENTRANCE (Degrees)	REFLECTANCE (Degrees)	CLUTTER (Degrees)	RETURNS (Degrees)	CNT.05 (Degrees)	CNT.25 (Degrees)	CNT.50 (Degrees)	CNT.75 (Degrees)	CNT.95 (Degrees)				
EGL	11AUG91:01:56	115.00	91.50	-	0	26.0	23.9	23.9	26.0	26.0	26.0	26.0	0.1	0.0	0.00	-0.20	-0.5	0.0	0.63	0.0	0.0	0.0	0.0	
EGL	11AUG91:01:57	117.50	91.50	-	0	26.0	23.9	23.9	26.0	26.0	26.0	26.0	0.1	0.0	0.00	-0.26	-0.8	0.0	0.57	0.0	0.0	0.0	0.0	
EGL	11AUG91:01:59	120.00	91.50	-	0	23.9	23.9	23.9	26.0	26.0	26.0	26.0	0.1	0.0	0.00	0.00	-0.8	0.0	0.50	0.0	0.0	0.0	0.0	
EGL	11AUG91:02:00	122.50	91.50	-	0	26.0	26.0	26.0	26.0	26.1	26.1	0.1	0.0	0.26	0.47	-0.6	0.0	0.52	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:02	125.00	91.50	-	0	26.0	23.9	24.0	26.0	26.0	26.0	0.1	0.0	0.00	0.15	-0.4	0.0	0.51	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:03	127.50	91.50	-	0	26.0	26.0	26.0	26.0	26.1	26.1	0.1	0.0	0.20	-0.15	-0.4	0.0	0.34	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:05	130.00	91.50	-	0	26.0	23.9	26.0	26.0	26.1	26.1	0.1	0.0	0.09	0.09	-0.9	0.0	0.50	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:06	132.50	91.50	-	0	26.1	24.0	24.0	26.1	26.1	26.2	0.1	0.0	0.56	0.29	-0.9	0.0	0.55	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:08	135.00	91.50	-	0	26.1	24.0	26.1	26.1	26.1	26.2	0.1	0.0	0.57	0.32	-0.5	0.0	0.47	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:09	137.50	91.50	-	0	26.1	24.0	26.0	26.1	26.1	26.2	0.1	0.0	0.39	0.15	-0.8	0.0	0.59	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:11	140.00	91.50	-	0	26.1	24.0	26.0	26.1	26.1	26.1	0.1	0.0	0.66	0.18	-0.6	0.0	0.44	0.0	0.0	0.0	0.0		
EGL	11AUG91:02:13	142.50	91.50	-	0	26.1	24.0	26.0	26.1	26.1	26.1	0.1	0.0	0.48	0.15	-0.5	0.0	0.42	0.0	0.0	0.0	0.0		
EGL	11AUG91:03:43	95.00	91.50	-	0	23.8	23.7	23.8	23.8	23.8	23.9	23.9	0.1	0.0	0.16	-0.33	-0.8	0.0	0.57	0.0	0.0	0.0	0.0	
EGL	11AUG91:03:44	97.50	91.50	-	0	23.8	23.7	23.7	23.8	23.8	23.9	23.9	0.1	0.0	0.21	0.66	0.2	0.0	0.37	-0.0	0.0	0.0	0.0	
EGL	11AUG91:03:46	100.00	91.50	-	0	23.7	23.6	23.7	23.7	23.8	23.9	0.1	0.0	0.07	0.50	-0.3	0.0	0.41	-0.0	0.0	0.0	0.0		
EGL	11AUG91:03:47	102.50	91.50	-	0	23.7	23.6	23.6	23.7	23.7	23.7	0.1	0.0	0.64	-0.40	-0.5	0.0	0.38	-0.0	0.0	0.0	0.0		
EGL	11AUG91:03:49	105.00	91.50	-	0	23.6	23.5	23.6	23.6	23.6	23.7	0.1	0.0	0.61	-0.37	-0.5	0.0	0.45	-0.0	0.0	0.0	0.0		
EGL	11AUG91:03:50	107.50	91.50	-	0	23.6	23.5	23.5	23.6	23.6	23.7	0.1	0.0	0.00	-0.45	-0.6	0.0	0.26	0.0	0.0	0.0	0.0		
EGL	11AUG91:03:52	110.00	91.50	-	0	23.6	23.5	23.6	23.6	23.6	23.7	0.1	0.0	0.14	-0.11	-1.1	0.0	0.53	0.0	0.0	0.0	0.0		
EGL	11AUG91:03:54	112.50	91.50	-	0	23.6	23.4	23.5	23.6	23.6	23.7	0.2	0.1	0.35	0.61	0.6	0.0	0.31	-0.0	0.0	0.0	0.0		
EGL	11AUG91:03:55	115.00	91.50	-	0	23.6	23.5	23.5	23.6	23.6	23.7	0.1	0.0	0.00	0.72	0.3	0.0	0.32	-0.0	0.0	0.0	0.0		
EGL	11AUG91:03:57	117.50	91.50	-	0	23.5	23.4	23.5	23.5	23.6	23.7	0.1	0.0	0.05	0.83	0.3	0.0	0.31	0.0	0.0	0.0	0.0		
EGL	11AUG91:03:58	122.50	91.50	-	0	23.5	23.4	23.5	23.5	23.6	23.7	0.1	0.0	0.22	-0.09	0.2	0.0	0.45	-0.0	0.0	0.0	0.0		
EGL	11AUG91:04:00	125.00	91.50	-	0	23.5	23.4	23.4	23.5	23.5	23.6	0.1	0.0	0.61	-0.13	-0.1	0.0	0.49	-0.0	0.0	0.0	0.0		
EGL	11AUG91:04:01	125.00	91.50	-	0	23.5	23.4	23.4	23.5	23.5	23.6	0.1	0.0	0.58	-0.21	0.1	0.0	0.42	-0.0	0.0	0.0	0.0		
EGL	11AUG91:04:03	127.50	91.50	-	0	23.4	23.3	23.4	23.4	23.5	23.6	0.2	0.0	0.59	-0.18	-0.5	0.0	0.54	-0.0	0.0	0.0	0.0		
EGL	11AUG91:04:05	130.00	91.50	-	0	23.5	23.4	23.4	23.5	23.5	23.6	0.1	0.0	0.67	0.17	-0.1	0.0	0.10	0.0	0.0	0.0	0.0		
EGL	11AUG91:04:06	132.50	91.50	-	0	23.4	23.4	23.4	23.4	23.5	23.5	0.1	0.0	0.32	0.41	-0.5	0.0	0.48	0.0	0.0	0.0	0.0		
EGL	11AUG91:04:08	135.00	91.50	-	0	23.4	23.3	23.4	23.4	23.4	23.5	0.1	0.0	0.26	-0.07	-0.0	0.0	0.36	0.0	0.0	0.0	0.0		
EGL	11AUG91:04:09	137.50	91.50	-	0	23.4	23.3	23.4	23.4	23.4	23.5	0.1	0.0	0.37	0.43	-0.1	0.0	0.32	0.0	0.0	0.0	0.0		
EGL	11AUG91:04:11	140.00	91.50	-	0	23.4	23.3	23.4	23.4	23.5	23.5	0.1	0.0	0.29	0.54	0.3	0.0	0.36	0.0	0.0	0.0	0.0		
EGL	11AUG91:04:13	142.50	91.50	-	0	23.4	23.2	23.3	23.4	23.4	23.5	23.6	0.1	0.0	0.25	0.29	1.1	0.0	0.34	0.0	0.0	0.0	0.0	
EGL	11AUG91:05:43	95.00	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.9	22.9	0.1	0.0	0.25	0.16	-0.6	0.0	0.57	0.0	0.0	0.0	0.0	
EGL	11AUG91:05:45	97.50	91.50	-	0	22.8	22.7	22.7	22.8	22.8	22.8	22.8	0.1	0.0	0.00	-0.27	1.4	0.0	0.29	0.0	0.0	0.0	0.0	
EGL	11AUG91:05:46	100.00	91.50	-	0	22.8	22.7	22.7	22.8	22.8	22.8	22.9	0.1	0.0	0.01	0.39	0.0	0.0	0.34	0.0	0.0	0.0	0.0	
EGL	11AUG91:05:48	102.50	91.50	-	0	22.8	22.7	22.7	22.8	22.8	22.8	22.9	0.1	0.0	0.09	0.32	-0.4	0.0	0.46	0.0	0.0	0.0	0.0	
EGL	11AUG91:05:49	105.00	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.9	22.9	0.1	0.0	0.16	0.18	-0.9	0.0	0.42	0.0	0.0	0.0	0.0	

	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BDA	MEAN (deg.)	MINIMUM (deg.)	PERC.05 (deg.)	MEDIAN (deg.)	MODE (deg.)	PERC.95 (deg.)	DMAJ(MIN)	RNO.90 (deg.)	SQ (deg.)	ENTROPY (Dimensions)	SCHEMES (Dimensions)	KURTOSIS (Dimensions)	CLUSTER (Dimensions)	RETICULDS (Dimensions)	CAT.05 (deg.)	CAT.25 (deg.)	CAT.50 (deg.)	CAT.75 (deg.)	CAT.95 (deg.)
F1	11AUG91:05:51	107.50	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.9	0.1	0.0	0.03	-0.7	-0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0
F2	11AUG91:05:52	110.00	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.9	0.1	0.0	0.01	0.44	-0.3	0.0	0.34	0.0	0.0	0.0	0.0	0.0
F3	11AUG91:05:53	112.50	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.8	0.1	0.0	0.00	0.27	-0.3	0.0	0.31	0.0	0.0	0.0	0.0	0.0
F4	11AUG91:05:55	115.00	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.9	0.1	0.0	0.00	0.37	-0.2	0.0	0.20	0.0	0.0	0.0	0.0	0.0
F5	11AUG91:05:56	117.50	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.8	0.1	0.0	0.00	0.43	-0.2	0.0	0.30	0.0	0.0	0.0	0.0	0.0
F6	11AUG91:05:58	120.00	91.50	-	0	22.8	22.7	22.8	22.8	22.8	22.9	0.1	0.0	0.02	0.68	0.5	0.0	0.36	0.0	0.0	0.0	0.0	0.0
F7	11AUG91:05:59	122.50	91.50	-	0	22.8	22.7	22.7	22.8	22.8	22.9	0.1	0.0	0.00	0.47	-0.1	0.0	0.22	0.0	0.0	0.0	0.0	0.0
F8	11AUG91:06:01	125.00	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.50	-0.1	0.0	0.30	0.0	0.0	0.0	0.0	0.0
F9	11AUG91:06:01	125.00	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.29	0.1	0.0	0.42	0.0	0.0	0.0	0.0	0.0
F10	11AUG91:06:02	127.50	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.17	-0.1	0.0	0.40	0.0	0.0	0.0	0.0	0.0
F11	11AUG91:06:03	130.00	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.28	-0.3	0.0	0.33	0.0	0.0	0.0	0.0	0.0
F12	11AUG91:06:05	132.50	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.13	-0.2	0.0	0.40	0.0	0.0	0.0	0.0	0.0
F13	11AUG91:06:06	135.00	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.35	-0.4	0.0	0.43	0.0	0.0	0.0	0.0	0.0
F14	11AUG91:06:08	137.50	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.45	-0.2	0.0	0.47	0.0	0.0	0.0	0.0	0.0
F15	11AUG91:06:09	140.00	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.27	0.3	0.0	0.41	0.0	0.0	0.0	0.0	0.0
F16	11AUG91:06:10	142.50	91.50	-	0	22.7	22.7	22.7	22.7	22.7	22.8	0.1	0.0	0.00	0.17	-1.2	0.0	0.63	-0.0	0.0	0.0	0.0	0.0
F17	11AUG91:07:42	95.00	91.50	156.61	4	26.7	26.5	26.6	26.7	26.6	26.9	0.2	0.1	0.69	0.86	0.4	0.0	0.46	-0.0	0.0	0.0	0.0	0.0
F18	11AUG91:07:43	97.50	91.50	155.06	4	26.7	26.6	26.7	26.7	26.7	26.9	0.2	0.1	0.50	0.27	-0.26	0.2	0.44	0.0	0.0	0.0	0.0	0.0
F19	11AUG91:07:45	100.00	91.50	153.51	4	26.7	26.6	26.6	26.7	26.7	26.8	0.1	0.0	0.27	-0.38	-0.1	0.0	0.65	0.0	0.0	0.0	0.0	0.0
F20	11AUG91:07:46	102.50	91.50	151.77	4	26.8	26.6	26.7	26.8	26.8	26.9	0.2	0.0	0.15	-0.38	-0.1	0.0	0.45	0.0	0.0	0.0	0.0	0.0
F21	11AUG91:07:48	105.00	91.50	150.06	4	26.8	26.6	26.7	26.8	26.8	26.9	0.1	0.0	0.07	0.21	0.2	0.0	0.41	-0.0	0.0	0.0	0.0	0.0
F22	11AUG91:07:49	107.50	91.50	148.18	4	26.9	26.7	26.8	26.9	26.9	25.0	0.2	0.6	0.64	0.32	-0.2	0.0	0.52	-0.0	0.0	0.0	0.0	0.0
F23	11AUG91:07:51	110.00	91.50	146.32	4	26.9	26.8	26.9	26.9	26.9	25.1	0.1	0.0	0.05	0.78	0.5	0.0	0.61	0.0	0.0	0.0	0.0	0.0
F24	11AUG91:07:52	112.50	91.50	144.37	4	25.0	26.9	26.9	25.0	25.1	25.1	0.1	0.7	0.16	0.79	0.5	0.0	0.61	0.0	0.0	0.0	0.0	0.0
F25	11AUG91:07:54	115.00	91.50	142.43	4	25.0	26.9	25.0	25.0	25.1	25.2	0.1	0.0	0.36	0.76	0.4	0.0	0.55	0.0	0.0	0.0	0.0	0.0
F26	11AUG91:07:55	117.50	91.50	140.43	4	25.1	25.0	25.1	25.1	25.1	25.2	0.1	0.0	0.66	0.77	0.7	0.0	0.60	0.0	0.0	0.0	0.0	0.0
F27	11AUG91:07:57	120.00	91.50	138.42	4	25.1	25.0	25.1	25.1	25.1	25.2	0.1	0.0	0.23	0.24	-0.3	0.0	0.56	0.0	0.0	0.0	0.0	0.0
F28	11AUG91:07:58	122.50	91.50	136.38	4	25.1	25.0	25.1	25.1	25.1	25.2	0.1	0.0	0.05	0.83	0.3	0.0	0.49	-0.0	0.0	0.0	0.0	0.0
F29	11AUG91:08:00	125.00	91.50	134.33	3	25.2	25.1	25.1	25.2	25.2	25.3	0.1	0.0	0.43	-0.2	-0.2	0.0	0.45	-0.0	0.0	0.0	0.0	0.0
F30	11AUG91:08:01	127.50	91.50	132.38	3	25.3	25.1	25.2	25.3	25.2	25.3	0.1	0.0	0.69	0.66	-0.1	0.0	0.52	-0.0	0.0	0.0	0.0	0.0
F31	11AUG91:08:03	130.00	91.50	130.19	3	25.3	25.2	25.3	25.3	25.3	25.4	0.1	0.0	0.25	0.41	-0.5	0.0	0.57	0.0	0.0	0.0	0.0	0.0
F32	11AUG91:08:04	132.50	91.50	128.12	3	25.3	25.2	25.3	25.3	25.3	25.4	0.1	0.0	0.06	0.42	-0.0	0.0	0.44	-0.0	0.0	0.0	0.0	0.0
F33	11AUG91:08:06	135.00	91.50	126.02	3	25.4	25.3	25.4	25.4	25.4	25.5	0.1	0.0	0.28	0.32	-0.3	0.0	0.42	-0.0	0.0	0.0	0.0	0.0
F34	11AUG91:08:07	137.50	91.50	123.95	3	25.4	25.3	25.4	25.5	25.5	25.6	0.2	0.0	0.69	-0.10	-0.8	0.0	0.55	0.0	0.0	0.0	0.0	0.0
F35	11AUG91:08:09	140.00	91.50	121.83	3	25.4	25.3	25.4	25.4	25.4	25.5	0.1	0.0	0.63	-0.07	0.1	0.0	0.48	0.0	0.0	0.0	0.0	0.0
F36	11AUG91:08:10	142.50	91.50	119.76	3	25.5	25.3	25.4	25.5	25.5	25.6	0.2	0.0	0.67	-0.25	-0.1	0.0	0.48	-0.0	0.0	0.0	0.0	0.0
F37	26AUG91:06:01	17.50	90.75	110.08	3	2.0	1.6	1.8	2.0	2.3	2.4	0.5	0.2	1.16	0.27	-0.3	-0.1	0.0	-0.1	0.0	0.1	0.1	0.1
F38	26AUG91:06:06	20.00	90.75	111.86	3	1.8	1.4	1.6	1.8	2.1	2.2	0.5	0.2	1.09	0.17	-0.4	-0.1	0.0	-0.1	0.0	0.1	0.1	0.1

UNIVERSITY : FAR-IR

TIME	ALTITUDE (Degrees)	BOA (Degrees)	MEAN (Degrees)	MINIMUM (Degrees)	PERCENT 95 (Degrees)	MEDIAN (Degrees)	MODE (Degrees)	PERCENT 95 (Degrees)	MAXIMUM (Degrees)	RANGE (Degrees)	ENTROPY (Degrees)	SKETCHINESS (Degrees)	FLUENTNESS (Degrees)	CLUSTER (Degrees)	REYNOLDS (Degrees)	CNT 05 (Degrees)	CNT 25 (Degrees)	CNT 50 (Degrees)	CNT 75 (Degrees)	CNT 95 (Degrees)	
FTD 25MAR09:10:10	45.00	90.75	85.84	2	7.7	7.0	7.3	7.7	7.8	8.3	8.6	0.9	0.3	1.70	-0.39	-0.3	-0.1	0.0	0.1	0.1	0.2
FTD 25MAR09:10:13	47.50	90.75	87.31	2	7.7	7.0	7.3	7.8	7.6	8.2	8.5	0.9	0.3	1.70	-0.12	-0.4	-0.1	0.1	0.1	0.1	0.2
FTD 25MAR09:10:16	50.00	90.75	88.54	2	8.2	7.5	7.9	8.2	8.1	8.7	9.2	0.8	0.3	1.67	0.29	-0.5	0.3	0.1	0.1	0.1	0.2
FTD 25MAR09:11:42	17.50	90.75	52.33	2	4.9	4.0	4.4	5.0	5.1	5.4	5.5	1.0	0.3	1.74	-0.87	0.6	-	0.0	0.1	0.1	0.2
FTD 25MAR09:11:44	20.00	90.75	52.96	2	5.1	4.2	4.5	5.2	4.9	5.7	5.9	1.2	0.4	1.94	-0.39	-0.4	-	0.0	0.1	0.1	0.2
FTD 25MAR09:11:47	22.50	90.75	53.75	2	5.5	4.9	5.1	5.7	5.9	6.1	6.3	1.0	0.4	1.69	-0.06	-1.1	-	0.1	0.1	0.1	0.2
FTD 25MAR09:11:49	25.00	90.75	54.41	2	5.7	4.6	5.1	5.8	5.8	6.1	6.3	1.0	0.4	1.82	-0.69	-0.1	-	0.0	0.1	0.1	0.2
FTD 25MAR09:11:52	27.50	90.75	55.23	2	5.9	4.8	5.3	6.1	6.2	6.5	6.8	1.2	0.4	2.03	-0.53	-0.3	-	0.0	0.1	0.1	0.2
FTD 25MAR09:11:54	30.00	90.75	55.91	2	6.4	5.0	5.4	6.6	6.6	7.0	7.3	1.6	0.6	2.18	-0.60	-0.6	-	0.0	0.1	0.1	0.2
FTD 25MAR09:11:57	32.50	90.75	56.77	2	6.6	5.2	5.8	6.8	6.8	7.2	7.3	1.4	0.6	2.04	-1.01	0.3	-	0.0	0.2	0.2	0.3
FTD 25MAR09:11:59	35.00	90.75	57.47	2	6.6	5.4	6.0	6.7	6.7	7.1	7.2	1.0	0.3	1.63	-1.58	3.1	-	0.0	0.1	0.1	0.2
FTD 25MAR09:12:02	37.50	90.75	58.37	2	7.1	6.6	6.9	7.1	7.1	7.4	7.5	0.5	0.2	1.12	-0.33	0.4	-	-0.1	0.0	0.1	0.1
FTD 25MAR09:12:04	40.00	90.75	59.10	2	7.3	7.0	7.2	7.4	7.3	7.6	7.7	0.4	0.2	1.10	0.19	-0.4	-	0.0	0.0	0.1	0.1
FTD 25MAR09:12:07	42.50	90.75	60.02	2	7.4	7.0	7.2	7.5	7.4	7.7	8.0	0.5	0.2	1.12	0.51	0.9	-	0.0	0.1	0.1	0.1
FTD 25MAR09:12:09	45.00	90.75	60.77	2	7.4	7.0	7.2	7.4	7.3	7.6	7.8	0.4	0.2	1.12	0.26	-0.6	-	0.0	0.0	0.1	0.1
FTD 25MAR09:12:12	47.50	90.75	61.73	2	7.2	6.8	7.0	7.3	7.2	7.5	7.9	0.5	0.2	1.24	0.27	0.6	-	0.0	0.1	0.1	0.1
FTD 25MAR09:12:15	50.00	90.75	62.49	2	7.5	7.0	7.3	7.6	7.4	7.9	8.2	0.6	0.2	1.39	0.32	-0.6	-	0.0	0.1	0.1	0.1
FTD 25MAR09:13:43	17.50	90.75	44.35	1	6.0	4.5	4.7	6.3	6.1	6.7	7.0	2.0	0.6	2.11	-1.27	0.9	-	-0.1	0.1	0.2	0.4
FTD 25MAR09:13:45	20.00	90.75	43.64	1	6.5	4.8	5.2	6.8	6.8	7.1	7.4	2.0	0.6	2.07	-1.67	1.4	-	-0.1	0.1	0.2	0.4
FTD 25MAR09:13:49	22.50	90.75	42.97	1	7.0	5.7	6.5	7.2	7.1	7.5	7.6	1.0	0.4	1.72	-1.31	2.3	-	0.0	0.1	0.3	0.4
FTD 25MAR09:13:52	25.00	90.75	42.35	1	7.4	5.6	6.2	7.5	7.5	7.9	8.4	1.6	0.5	1.98	-1.57	2.3	-	-0.1	0.0	0.3	0.4
FTD 25MAR09:13:55	27.50	90.75	41.73	1	7.6	5.2	6.4	7.9	7.9	8.2	8.3	1.8	0.6	1.97	-1.63	1.9	-	-0.1	0.1	0.3	0.4
FTD 25MAR09:13:57	30.00	90.75	41.16	1	8.3	6.2	6.8	8.5	8.8	9.1	9.4	2.3	0.8	2.40	-1.03	0.3	-	-0.1	0.2	0.3	0.4
FTD 25MAR09:14:00	32.50	90.75	40.61	1	9.2	7.1	7.7	9.4	9.5	9.8	10.0	2.0	0.7	2.16	-1.44	1.2	-	-0.1	0.1	0.3	0.4
FTD 25MAR09:14:03	35.00	90.75	40.20	1	9.3	7.1	8.1	9.5	9.3	10.0	10.4	1.9	0.6	2.11	-1.72	3.6	-	-0.1	0.1	0.2	0.4
FTD 25MAR09:14:06	37.50	90.75	39.75	1	9.3	8.7	9.0	9.3	9.3	9.9	10.3	1.0	0.3	1.65	0.86	0.6	-	-0.2	-0.1	-0.1	0.1
FTD 25MAR09:14:08	40.00	90.75	39.35	1	9.7	9.1	9.3	9.7	9.6	10.1	10.5	0.7	0.2	1.60	0.13	-0.5	-	-0.1	-0.1	0.0	0.1
FTD 25MAR09:14:11	42.50	90.75	38.99	1	10.4	9.0	10.1	10.4	10.5	10.9	11.4	0.9	0.3	1.73	0.45	-0.0	-	-0.1	0.0	0.0	0.1
FTD 25MAR09:14:14	45.00	90.75	38.83	1	9.9	8.6	9.8	10.0	9.8	10.4	10.7	0.7	0.2	1.42	0.57	0.3	-	0.0	0.0	0.1	0.2
FTD 25MAR09:14:17	47.50	90.75	38.60	1	10.0	9.2	9.7	10.0	10.0	10.5	10.9	0.9	0.3	1.65	0.36	0.5	-	-0.1	0.0	0.1	0.2
FTD 25MAR09:14:19	50.00	90.75	38.42	1	10.6	9.6	10.2	10.7	10.5	11.3	11.7	1.1	0.5	1.93	0.32	0.1	-	0.0	0.1	0.1	0.2
FTD 25MAR09:15:48	20.00	90.75	52.04	2	8.5	7.3	7.7	8.6	8.6	8.9	9.0	1.2	0.4	1.59	-1.72	2.4	-	-0.1	0.0	0.2	0.3
FTD 25MAR09:15:51	22.50	90.75	50.31	2	8.5	7.4	7.7	8.7	8.6	9.1	9.2	1.3	0.5	1.72	-1.45	1.6	-	0.0	0.1	0.2	0.4
FTD 25MAR09:15:53	25.00	90.75	48.45	2	8.8	8.0	8.5	8.9	8.7	9.2	9.3	0.6	0.2	1.42	-0.58	2.0	-	0.0	0.0	0.2	0.5
FTD 25MAR09:15:56	27.50	90.75	46.70	2	9.6	8.4	9.1	9.6	9.6	10.1	10.5	1.0	0.4	1.76	-0.79	1.6	-	-0.1	0.0	0.1	0.2
FTD 25MAR09:15:59	30.00	90.75	44.05	1	9.5	7.6	8.8	9.6	9.6	9.9	10.1	1.1	0.3	1.56	-1.76	3.7	-	-0.0	0.0	0.1	0.2
FTD 25MAR09:15:59	32.50	90.75	43.09	1	9.8	8.6	9.0	9.9	9.9	10.3	10.6	1.3	0.4	1.77	-1.41	2.3	-	0.0	0.1	0.2	0.3

WAYEAND : FAR-IR

LITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BDN (Degrees)	RAA (Degrees)	RAZ (Degrees)	MIN (Degrees)	PERC_05 (Degrees)	MEAN (Degrees)	MODE (Degrees)	PERC_95 (Degrees)	MAX (Degrees)	RM_90 (Degrees)	ENTROPY (Degrees)	RECTNESS (Degrees)	RM_TOSTIS (Degrees)	CLUTTER (Degrees)	REYNOLDS (Degrees)	CNT_05 (Degrees)	CNT_25 (Degrees)	CNT_50 (Degrees)	CNT_75 (Degrees)	CNT_95 (Degrees)
FTD	26MAR91:21:52	20.00	90.75	-	0	6.0	5.5	5.6	6.0	6.2	6.5	6.6	6.9	0.3	1.71	0.05	-1.2	-	-0.2	-0.1	0.0	0.1	0.1
FTD	26MAR91:21:55	22.50	90.75	-	0	6.3	5.5	6.0	6.3	6.1	6.8	6.9	0.8	0.3	1.65	0.34	-0.9	-	-0.2	-0.1	0.0	0.1	0.2
FTD	26MAR91:21:57	25.00	90.75	-	0	6.6	5.8	6.2	6.7	6.9	7.1	7.2	0.9	0.3	1.71	-0.37	-0.1	-	-0.2	-0.1	0.0	0.1	0.2
FTD	26MAR91:22:00	27.50	90.75	-	0	7.0	6.6	6.8	7.0	6.9	7.4	7.5	0.7	0.2	1.42	0.49	-0.5	-	-0.1	-0.1	-0.0	0.0	0.1
FTD	26MAR91:22:02	30.00	90.75	-	0	6.9	6.6	6.6	6.9	6.7	7.3	7.4	0.7	0.2	1.50	0.34	-0.8	-	-0.1	-0.1	0.0	0.0	0.1
FTD	26MAR91:22:05	32.50	90.75	-	0	7.0	6.5	6.7	7.1	7.2	7.3	7.4	0.6	0.2	1.41	-0.16	-1.0	-	-0.1	-0.1	0.0	0.1	0.1
FTD	26MAR91:22:12	40.00	90.75	-	0	7.6	7.2	7.4	7.6	7.5	7.9	8.0	0.4	0.1	1.01	0.48	-0.2	-	-0.1	-0.0	-0.0	0.0	0.0
FTD	26MAR91:22:15	42.50	90.75	-	0	7.8	7.5	7.6	7.8	7.8	8.0	8.2	0.5	0.1	1.08	0.19	-0.3	-	-0.1	-0.0	0.0	0.0	0.0
FTD	26MAR91:22:17	45.00	90.75	-	0	7.9	7.4	7.7	7.9	7.9	8.2	8.3	0.5	0.1	1.17	-0.06	-0.1	-	-0.1	-0.0	0.0	0.0	0.0
FTD	26MAR91:22:20	47.50	90.75	-	0	8.1	7.7	7.8	8.1	8.1	8.3	8.6	0.5	0.2	1.20	-0.21	-0.4	0.1	0.25	-0.1	-0.0	0.0	0.0
FTD	26MAR91:22:22	50.00	90.75	-	0	8.3	7.9	8.1	8.3	8.3	8.5	8.7	0.4	0.1	1.08	-0.08	-0.5	0.1	0.20	-0.1	-0.0	0.0	0.0
FTD	26MAR91:23:16	17.50	90.75	-	0	6.1	5.5	5.6	6.1	5.9	6.7	6.9	1.0	0.4	1.85	0.11	-1.4	-	-0.2	-0.1	0.0	0.0	0.1
FTD	26MAR91:23:19	20.00	90.75	-	0	6.3	5.7	5.8	6.2	5.8	6.8	7.0	1.0	0.3	1.86	0.20	-1.3	-	-0.2	-0.1	0.0	0.0	0.1
FTD	26MAR91:23:52	22.50	90.75	-	0	6.1	5.2	5.7	6.0	5.9	6.6	6.8	0.9	0.3	1.69	0.42	-0.8	-	-0.2	-0.1	-0.0	0.0	0.1
FTD	26MAR91:23:54	25.00	90.75	-	0	6.7	5.8	6.3	6.7	6.5	7.2	7.4	0.9	0.3	1.81	-0.00	-0.5	-	-0.2	-0.1	-0.0	0.0	0.1
FTD	26MAR91:23:57	27.50	90.75	-	0	6.8	6.3	6.5	6.7	6.6	7.3	7.5	0.8	0.3	1.54	0.76	-0.5	-	-0.2	-0.1	-0.0	0.0	0.1
FTD	26MAR91:23:59	30.00	90.75	-	0	7.0	6.5	6.6	7.0	6.8	7.5	7.8	0.8	0.3	1.72	0.45	-0.8	-	-0.1	-0.1	-0.0	0.0	0.1
FTD	27MAR91:00:02	32.50	90.75	-	0	7.6	7.0	7.3	7.6	7.4	7.9	8.1	0.7	0.2	1.47	-0.03	-0.9	-	-0.1	-0.0	-0.0	0.0	0.1
FTD	27MAR91:00:04	35.00	90.75	-	0	7.3	6.9	7.1	7.4	7.3	7.6	7.8	0.5	0.2	1.18	0.03	-0.4	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:00:07	37.50	90.75	-	0	8.1	7.7	7.9	8.1	7.9	8.3	8.4	0.4	0.1	1.11	0.11	-0.6	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:00:09	40.00	90.75	-	0	8.4	8.0	8.2	8.4	8.3	8.6	8.7	0.4	0.1	0.93	0.36	-0.2	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:00:12	42.50	90.75	-	0	8.3	8.0	8.2	8.4	8.3	8.6	8.7	0.4	0.1	1.10	0.13	-0.5	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:00:14	45.00	90.75	-	0	8.9	8.5	8.7	8.9	8.9	9.1	9.3	0.4	0.1	1.13	0.05	-0.4	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:00:17	47.50	90.75	-	0	8.7	8.2	8.4	8.7	8.7	8.9	9.1	0.5	0.2	1.18	-0.40	-0.1	0.1	0.19	-0.1	0.0	0.0	0.1
FTD	27MAR91:00:19	50.00	90.75	-	0	9.0	8.5	8.8	9.0	9.1	9.2	9.3	0.4	0.1	1.02	-0.25	-0.4	0.1	0.14	-0.0	0.0	0.0	0.0
FTD	27MAR91:01:51	17.50	90.75	-	0	4.9	3.7	4.0	4.9	4.2	5.9	6.1	1.9	0.7	2.27	0.07	-1.5	-	-0.4	-0.3	-0.0	0.1	0.2
FTD	27MAR91:01:53	20.00	90.75	-	0	5.2	4.2	4.4	5.0	4.5	6.1	6.4	1.7	0.7	2.26	0.16	-1.5	-	-0.4	-0.3	0.0	0.1	0.2
FTD	27MAR91:01:56	22.50	90.75	-	0	4.9	3.6	4.3	4.7	4.5	5.8	6.0	1.5	0.6	2.14	0.44	-1.1	-	-0.4	-0.3	-0.1	0.1	0.2
FTD	27MAR91:01:58	25.00	90.75	-	0	5.7	4.3	5.0	5.7	5.6	6.7	7.0	1.7	0.6	2.36	0.13	-0.8	-	-0.5	-0.3	-0.0	0.0	0.2
FTD	27MAR91:02:01	27.50	90.75	-	0	5.8	4.8	5.3	5.7	5.6	6.8	7.2	1.5	0.5	2.07	0.80	-0.4	-	-0.4	-0.2	-0.1	0.0	0.1
FTD	27MAR91:02:04	30.00	90.75	-	0	6.1	5.2	5.5	6.0	5.8	7.1	7.4	1.6	0.5	2.20	0.53	-0.8	-	-0.3	-0.2	-0.1	0.0	0.1
FTD	27MAR91:02:06	32.50	90.75	-	0	6.8	5.9	6.2	6.8	6.6	7.5	7.7	1.3	0.4	2.04	0.15	-0.8	-	-0.2	-0.1	-0.1	0.0	0.1
FTD	27MAR91:02:09	35.00	90.75	-	0	6.7	6.0	6.3	6.7	6.7	7.1	7.4	0.8	0.3	1.66	0.26	-0.2	-	-0.1	-0.1	-0.0	0.0	0.1
FTD	27MAR91:02:11	37.50	90.75	-	0	6.8	6.1	6.4	6.8	6.7	7.1	7.2	0.6	0.2	1.40	-0.41	-0.1	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:02:14	40.00	90.75	-	0	6.8	6.2	6.5	6.8	6.6	7.1	7.2	0.6	0.2	1.33	0.21	-0.2	-	-0.1	-0.1	0.0	0.0	0.1
FTD	27MAR91:02:17	42.50	90.75	-	0	6.9	6.4	6.6	7.0	7.0	7.2	7.4	0.6	0.2	1.44	-0.08	-0.5	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:02:19	45.00	90.75	-	0	7.4	6.7	7.1	7.5	7.5	7.8	7.9	0.7	0.2	1.50	-0.24	-0.5	-	-0.1	-0.0	0.0	0.0	0.1

WAVEBAND : FAR-IR																								
SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BIRD (Degrees)	BOA (Deg.)	MEAN (Deg.)	MINIMUM (Deg.)	PERC 95 (Deg.)	MEDIAN (Deg.)	MODE (Deg.)	PERC 95 (Deg.)	MAXIMUM (Deg.)	RNG 90 (Deg.)	ENTROPY (Dimensions)	SKELTONS (Dimensions)	FLUTTER (Deg.)	RETICULOS (Dimensions)	CNT 05 (Deg.)	CNT 25 (Deg.)	CNT 50 (Deg.)	CNT 75 (Deg.)	CNT 95 (Deg.)		
FTD	27MAR91:02:22	47.50	90.75	-	0	7.8	7.1	7.4	7.6	7.9	8.1	8.2	0.7	0.2	1.44	-0.59	0.1	0.2	0.12	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:02:25	53.00	90.75	-	0	7.9	7.3	7.6	7.9	8.0	8.1	8.2	0.5	0.2	1.19	-0.28	-0.5	0.1	0.09	-0.1	-0.0	0.0	0.0	0.0
FTD	27MAR91:03:45	17.50	90.75	-	0	4.3	4.2	4.4	4.8	4.5	5.7	6.8	1.3	0.4	1.08	1.05	0.0	-	-0.5	-0.2	-0.1	0.0	0.1	
FTD	27MAR91:03:47	20.00	90.75	-	0	5.7	4.9	5.1	5.6	5.1	6.6	6.8	1.5	0.6	2.13	0.21	-1.5	-	-0.3	-0.2	0.0	0.1	0.1	
FTD	27MAR91:03:50	22.50	90.75	-	0	5.6	4.6	5.2	5.5	5.4	6.3	6.6	1.1	0.4	1.94	0.54	-0.8	-	-0.3	-0.2	-0.1	0.0	0.1	
FTD	27MAR91:03:53	25.00	90.75	-	0	6.2	5.2	5.7	6.2	5.9	6.9	7.2	1.2	0.4	1.90	0.33	-0.0	-	-0.3	-0.2	-0.0	0.1	0.1	
FTD	27MAR91:03:56	27.50	90.75	-	0	6.6	6.2	6.3	6.5	6.4	7.2	7.4	0.9	0.3	1.56	0.96	-0.0	-	-0.2	-0.1	-0.0	0.0	0.1	
FTD	27MAR91:03:59	30.00	90.75	-	0	6.6	6.1	6.3	6.6	6.4	7.1	7.4	0.8	0.3	1.61	0.72	-0.4	-	-0.1	-0.1	-0.0	0.0	0.0	
FTD	27MAR91:04:02	32.50	90.75	-	0	7.1	6.7	6.8	7.1	6.9	7.5	7.7	0.7	0.2	1.47	0.55	-0.4	-	-0.1	-0.0	-0.0	0.0	0.0	
FTD	27MAR91:04:04	35.00	90.75	-	0	7.1	6.7	6.9	7.2	7.1	7.5	7.7	0.7	0.2	1.21	0.39	0.1	-	-0.1	-0.0	-0.0	0.0	0.0	
FTD	27MAR91:04:07	37.50	90.75	-	0	7.7	7.3	7.5	7.7	7.6	7.9	8.0	0.4	0.1	0.95	0.08	-0.6	-	-0.0	0.0	0.0	0.0	0.0	
FTD	27MAR91:04:10	40.00	90.75	-	0	7.7	7.3	7.5	7.7	7.6	7.9	8.0	0.4	0.1	0.92	0.38	-0.5	-	-0.0	0.0	0.0	0.0	0.0	
FTD	27MAR91:04:13	42.50	90.75	-	0	8.3	8.0	8.2	8.4	8.4	8.6	8.7	0.4	0.1	0.96	0.16	-0.5	-	-0.0	0.0	0.0	0.0	0.0	
FTD	27MAR91:04:16	45.00	90.75	-	0	8.3	8.0	8.2	8.3	8.3	8.5	8.6	0.4	0.1	0.92	0.13	-0.1	-	-0.0	0.0	0.0	0.0	0.0	
FTD	27MAR91:04:19	47.50	90.75	-	0	8.7	8.4	8.5	8.7	8.7	8.9	9.0	0.4	0.1	1.00	0.11	-0.5	0.1	0.26	-0.0	0.0	0.0	0.0	
FTD	27MAR91:04:22	50.00	90.75	-	0	8.8	8.4	8.6	8.8	8.8	9.0	9.1	0.4	0.1	0.98	0.03	-0.7	0.1	0.19	-0.0	0.0	0.0	0.0	
FTD	27MAR91:05:49	17.50	90.75	-	0	6.8	6.5	6.6	6.9	6.8	7.2	7.3	0.6	0.2	1.37	0.22	-0.9	-	-0.1	-0.1	0.0	0.1	0.1	
FTD	27MAR91:05:52	20.00	90.75	-	0	6.9	6.5	6.6	6.9	6.6	7.3	7.4	0.7	0.2	1.52	0.22	-1.0	-	-0.1	-0.1	0.0	0.1	0.1	
FTD	27MAR91:05:55	22.50	90.75	-	0	7.1	6.3	6.9	7.1	6.9	7.5	7.7	0.7	0.2	1.42	0.34	-0.4	-	-0.1	-0.1	-0.1	0.0	0.1	
FTD	27MAR91:05:57	25.00	90.75	-	0	7.9	7.1	7.5	7.9	8.0	8.2	8.4	0.7	0.2	1.58	0.46	0.3	-	-0.2	-0.1	0.0	0.0	0.1	
FTD	27MAR91:06:00	27.50	90.75	120.66	3	7.7	7.3	7.5	7.7	7.5	8.1	8.2	0.6	0.2	1.33	0.56	-0.5	-	-0.1	-0.1	0.0	0.0	0.1	
FTD	27MAR91:06:02	30.00	90.75	122.62	3	7.9	7.5	7.7	7.9	7.8	8.2	8.5	0.6	0.2	1.35	0.37	-0.7	-	-0.1	-0.1	0.0	0.0	0.1	
FTD	27MAR91:06:05	32.50	90.75	124.76	3	8.1	7.7	7.9	8.1	8.1	8.4	8.5	0.5	0.2	1.23	0.04	-0.9	-	-0.0	-0.0	0.0	0.0	0.1	
FTD	27MAR91:06:07	35.00	90.75	126.72	3	8.5	8.2	8.3	8.5	8.5	8.7	8.8	0.4	0.1	0.99	0.07	-0.5	-	-0.0	-0.0	0.0	0.0	0.0	
FTD	27MAR91:06:10	37.50	90.75	128.65	3	8.7	8.4	8.6	8.8	8.7	9.0	9.1	0.4	0.1	1.02	0.13	-0.7	-	-0.0	0.0	0.0	0.0	0.0	
FTD	27MAR91:06:12	40.00	90.75	130.80	3	8.9	8.6	8.8	8.9	8.9	9.1	9.3	0.4	0.1	1.00	0.36	-0.5	-	-0.1	-0.0	0.0	0.0	0.0	
FTD	27MAR91:06:15	42.50	90.75	132.93	3	9.1	8.8	8.9	9.1	9.1	9.3	9.4	0.4	0.1	1.01	0.06	-0.7	-	-0.0	0.0	0.0	0.0	0.1	
FTD	27MAR91:06:17	45.00	90.75	134.86	3	9.6	9.2	9.4	9.6	9.5	9.8	9.9	0.4	0.1	1.01	0.03	-0.5	-	-0.0	0.0	0.0	0.0	0.0	
FTD	27MAR91:06:20	47.50	90.75	136.97	4	9.8	9.5	9.7	9.9	9.8	10.1	10.1	0.4	0.1	0.96	0.03	-0.6	0.1	0.38	-0.0	0.0	0.0	0.0	
FTD	27MAR91:06:22	50.00	90.75	138.89	4	10.1	9.8	10.0	10.2	10.1	10.3	10.4	0.3	0.1	0.82	0.09	-0.6	0.1	0.27	-0.0	0.0	0.0	0.0	
FTD	11JUL91:05:00	23.00	90.75	-	0	13.2	12.3	12.6	13.1	12.8	14.0	14.5	1.4	0.5	2.10	0.59	-0.6	-	-0.3	-0.2	-0.1	0.1	0.2	
FTD	11JUL91:05:01	25.50	90.75	-	0	12.7	12.3	12.4	12.6	12.5	13.3	13.7	0.9	0.3	1.65	0.82	-0.5	-	-0.2	-0.1	-0.0	0.0	0.1	
FTD	11JUL91:05:03	28.00	90.75	-	0	12.5	12.1	12.3	12.4	12.4	12.9	13.2	0.7	0.2	1.34	0.82	-0.5	-	-0.1	-0.1	-0.0	0.0	0.1	
FTD	11JUL91:05:05	30.50	90.75	-	0	12.8	12.4	12.5	12.8	12.6	13.3	13.9	0.8	0.3	1.61	1.01	0.9	-	-0.2	-0.1	-0.0	0.0	0.1	
FTD	11JUL91:05:08	35.50	90.75	-	0	12.6	12.1	12.3	12.5	12.4	13.3	13.5	1.0	0.3	1.62	1.11	0.2	-	-0.2	-0.1	-0.0	0.0	0.1	
FTD	11JUL91:05:10	38.00	90.75	-	0	12.5	12.1	12.3	12.5	12.3	12.9	13.3	0.6	0.2	1.39	0.90	0.4	-	-0.1	-0.0	0.0	0.0	0.1	
FTD	11JUL91:05:12	40.50	90.75	-	0	12.9	12.6	12.7	12.9	12.8	13.3	13.4	0.6	0.2	1.34	0.32	-0.8	-	-0.1	-0.0	0.0	0.0	0.1	

UNVEILED : FAR-IR

SITE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	BIRD (Degrees)	BOA (Deg.)	MINIMUM (Deg.)	PERC-50 (Deg.)	MODAR (Deg.)	MODE (Deg.)	PERC-50 (Deg.)	MAXIMUM (Deg.)	RMS-50 (Deg.)	SD (Deg.)	ENTROPY (Information)	EXTRACT (Information)	CLUSTERS (Information)	CLUSTER (Deg.)	RETURNS (Information)	CLUSTER (Deg.)	REYNOLDS (Information)	CNT-05 (Deg.)	CNT-25 (Deg.)	CNT-50 (Deg.)	CNT-75 (Deg.)	CNT-95 (Deg.)
FTD	11AUG91:16:57	28.06	90.75	62.30	2	26.8	25.2	25.9	26.9	26.8	27.4	27.6	1.5	0.4	2.04	-1.00	1.2	-	-	0.0	0.1	0.2	0.3	0.4	
FTD	11AUG91:16:59	30.50	90.75	60.73	2	27.1	25.4	25.9	27.3	27.1	27.9	29.1	2.0	0.7	2.36	-0.59	0.5	-	-	-0.2	0.0	0.2	0.3	0.5	
FTD	11AUG91:17:02	33.00	90.75	59.06	2	27.5	26.2	26.9	27.7	27.8	28.2	29.1	1.3	0.5	2.15	-0.17	-0.1	-	-	-0.1	0.1	0.3	0.3	0.5	
FTD	11AUG91:17:05	35.50	90.75	57.50	2	27.5	26.5	27.0	27.5	27.4	28.2	28.8	1.2	0.4	2.06	0.21	-0.6	-	-	-0.3	0.0	0.1	0.2	0.3	
FTD	11AUG91:17:10	40.50	90.75	54.25	2	27.8	26.8	27.4	27.8	27.6	28.4	28.8	1.0	0.3	1.84	0.34	-0.2	-	-	-0.1	0.0	0.1	0.2	0.3	
FTD	11AUG91:17:12	43.00	90.75	52.46	2	27.5	26.8	27.1	27.5	27.3	28.1	28.7	1.0	0.3	1.78	0.80	0.5	-	-	-0.1	0.0	0.1	0.2	0.3	
FTD	11AUG91:17:15	45.50	90.75	51.06	2	27.7	27.0	27.3	27.7	27.7	28.1	28.6	0.8	0.2	1.62	0.18	-0.3	-	-	-0.1	-0.0	0.0	0.1	0.2	
FTD	11AUG91:17:18	48.00	90.75	49.43	2	27.7	26.9	27.3	27.7	27.6	28.2	29.1	0.8	0.3	1.48	0.40	-0.1	0.2	0.07	-0.1	0.0	0.1	0.2	0.2	
FTD	11AUG91:17:20	50.50	90.75	47.83	2	27.7	26.9	27.3	27.6	27.5	28.3	28.8	1.0	0.3	1.80	0.90	-0.2	0.3	0.06	-0.1	0.0	0.0	0.1	0.3	
FTD	11AUG91:17:23	53.00	90.75	46.22	2	27.7	26.7	27.3	27.7	27.5	28.4	29.8	1.1	0.4	1.92	0.80	1.8	0.3	0.11	-0.2	-0.0	0.0	0.1	0.3	
FTD	11AUG91:17:25	55.50	90.75	44.44	1	28.0	27.1	27.5	28.0	27.8	28.5	29.7	1.0	0.3	1.85	1.01	2.5	0.3	0.01	-0.2	-0.0	0.1	0.2	0.3	
FTD	11AUG91:18:48	23.00	90.75	80.18	2	22.6	21.9	22.3	22.7	22.7	22.9	23.1	0.7	0.2	1.37	-0.83	1.1	-	-	-0.1	0.0	0.1	0.1	0.1	
FTD	11AUG91:18:50	25.50	90.75	78.12	2	23.0	22.3	22.6	23.0	23.0	23.2	23.3	0.6	0.2	1.22	-1.11	1.0	-	-	-0.0	0.0	0.1	0.1	0.2	
FTD	11AUG91:18:52	28.00	90.75	76.22	2	22.8	22.3	22.6	22.8	22.9	23.0	23.3	0.5	0.1	1.13	-0.21	0.3	-	-	-0.0	0.0	0.0	0.1	0.1	
FTD	11AUG91:18:55	30.50	90.75	74.14	2	22.7	22.1	22.3	22.7	22.6	23.2	23.9	0.8	0.3	1.55	1.07	2.4	-	-	-0.0	0.0	0.0	0.1	0.2	
FTD	11AUG91:18:57	33.00	90.75	72.21	2	23.0	22.6	22.8	23.0	22.9	23.5	24.3	0.7	0.2	1.34	1.81	4.8	-	-	-0.0	0.0	0.0	0.1	0.2	
FTD	11AUG91:18:59	35.50	90.75	70.15	2	23.2	22.7	22.9	23.2	23.2	23.6	23.9	0.7	0.2	1.40	0.57	0.7	-	-	-0.1	-0.0	0.0	0.1	0.2	
FTD	11AUG91:19:02	38.00	90.75	68.04	2	23.3	22.7	23.0	23.3	23.2	23.7	24.1	0.7	0.2	1.49	0.40	0.1	-	-	-0.1	0.0	0.0	0.1	0.2	
FTD	11AUG91:19:04	40.50	90.75	66.10	2	23.7	23.1	23.5	23.7	23.7	24.1	24.5	0.6	0.2	1.31	0.78	0.8	-	-	-0.0	0.0	0.0	0.1	0.2	
FTD	11AUG91:19:08	45.50	90.75	61.89	2	23.6	23.2	23.4	23.7	23.6	23.9	24.1	0.5	0.2	1.17	0.08	-0.1	-	-	-0.1	0.0	0.0	0.1	0.2	
FTD	11AUG91:19:11	48.00	90.75	59.85	2	23.8	23.2	23.6	23.9	23.9	24.1	24.6	0.5	0.2	1.26	-0.14	0.4	0.2	0.14	-0.1	0.0	0.0	0.1	0.2	
FTD	11AUG91:19:14	50.50	90.75	57.82	2	23.9	23.2	23.6	23.9	23.8	24.3	24.5	0.7	0.2	1.09	0.12	-0.1	0.2	0.11	-0.1	0.0	0.0	0.1	0.2	
FTD	11AUG91:19:16	53.00	90.75	55.84	2	23.9	23.5	23.7	24.0	23.9	24.3	25.8	0.6	0.2	1.29	2.68	16.2	0.2	0.30	-0.1	0.0	0.0	0.1	0.1	
FTD	11AUG91:19:19	55.50	90.75	53.71	2	23.7	23.3	23.5	23.7	23.7	24.1	25.2	0.6	0.2	1.29	1.86	8.2	0.2	0.07	-0.1	0.0	0.0	0.1	0.2	
FTD	11AUG91:21:00	23.00	90.75	-	0	16.0	15.2	15.5	15.9	15.7	17.0	17.5	1.4	0.4	2.01	1.13	0.6	-	-	-0.3	-0.3	-0.2	0.0	0.2	
FTD	11AUG91:21:03	28.00	90.75	-	0	15.3	14.8	15.0	15.2	15.1	16.1	16.5	1.1	0.3	1.66	1.44	2.0	-	-	-0.2	-0.1	-0.1	-0.0	0.1	
FTD	11AUG91:21:06	30.50	90.75	-	0	16.1	15.3	15.5	16.0	15.5	17.0	17.4	1.6	0.5	2.21	0.49	-1.1	-	-	-0.4	-0.2	-0.1	0.0	0.3	
FTD	11AUG91:21:06	33.00	90.75	-	0	16.2	15.3	15.6	16.1	15.8	17.2	17.7	1.6	0.6	2.23	0.48	-1.0	-	-	-0.3	-0.2	-0.1	0.0	0.1	
FTD	11AUG91:21:07	35.50	90.75	-	0	16.2	15.4	15.6	16.2	15.7	16.9	17.1	1.3	0.4	2.02	0.23	-0.8	-	-	-0.2	-0.1	-0.0	0.1	0.2	
FTD	11AUG91:21:07	38.00	90.75	-	0	16.8	15.6	15.9	16.9	16.8	17.4	17.8	1.5	0.4	2.18	-0.46	-0.4	-	-	-0.3	-0.1	0.0	0.2	0.4	
FTD	11AUG91:21:10	40.50	90.75	-	0	16.8	15.7	16.0	16.9	17.4	17.7	18.1	1.7	0.6	2.37	0.03	-1.0	-	-	-0.3	-0.2	-0.0	0.0	0.2	
FTD	11AUG91:21:12	43.00	90.75	-	0	16.4	15.0	15.3	16.4	17.5	17.6	17.8	2.3	0.7	2.57	0.02	-1.3	-	-	-0.3	-0.1	0.0	0.1	0.2	
FTD	11AUG91:21:13	45.50	90.75	-	0	17.0	15.3	15.9	16.9	17.9	18.1	18.4	2.2	0.8	2.55	0.02	-1.4	-	-	-0.3	-0.1	0.0	0.1	0.2	
FTD	11AUG91:21:15	48.00	90.75	-	0	16.4	16.7	15.2	16.5	17.9	17.5	17.9	2.3	0.8	2.62	-0.11	-1.2	0.7	0.12	-0.3	-0.1	0.0	0.1	0.2	
FTD	11AUG91:21:16	50.50	90.75	-	0	16.7	15.1	15.7	16.8	17.0	17.7	17.6	1.9	0.7	2.46	-0.26	-1.1	0.6	0.13	-0.2	-0.0	0.0	0.1	0.3	
FTD	11AUG91:21:18	53.00	90.75	-	0	17.3	15.7	16.3	17.3	18.0	18.2	18.6	2.0	0.7	2.48	-0.15	-1.1	0.6	0.05	-0.2	-0.0	0.0	0.1	0.2	
FTD	11AUG91:21:19	55.50	90.75	-	0	17.3	16.0	16.5	17.3	17.3	18.0	18.6	1.6	0.5	2.27	-0.12	-0.7	0.5	0.04	-0.2	-0.0	0.0	0.1	0.2	

SITE		TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BIDIR (Degrees)	BOA	MEAN (Deg. C)	MINIMUM (Deg. C)	PERC (Deg. C)	MODIAN (Deg. C)	MODE (Deg. C)	PERC (Deg. C)	PERC (Deg. C)	MAXIMUM (Deg. C)	END 90 (Deg. C)	END 90 (Deg. C)	ENTROPY (Information)	SKINNESS (Information)	RUNTOSIS (Information)	CLUTTER (Deg. C)	REYNOLDS (Information)	CNT 05 (Deg. C)	CNT 25 (Deg. C)	CNT 50 (Deg. C)	CNT 75 (Deg. C)	CNT 95 (Deg. C)
FTD	11AUG91:23:00	23.00	90.75	-	-	0	12.4	10.5	11.0	12.3	13.2	14.2	14.5	3.2	1.0	2.89	0.16	-1.1	-	-	-	-0.2	-0.1	-0.0	0.0	0.1
FTD	11AUG91:23:01	25.50	90.75	-	-	0	13.1	11.8	11.6	13.2	13.2	15.0	15.3	3.4	1.0	2.92	0.23	-0.5	-	-	-	-0.3	-0.1	-0.0	0.0	0.2
FTD	11AUG91:23:05	30.50	90.75	-	-	0	13.6	11.0	11.8	13.6	12.7	15.4	15.8	3.6	1.1	3.04	-0.12	-0.9	-	-	-	-0.9	-0.3	-0.1	0.0	0.3
FTD	11AUG91:23:07	33.00	90.75	-	-	0	13.1	10.7	11.5	13.1	12.6	15.0	15.4	3.5	1.2	3.03	0.04	-1.3	-	-	-	-1.0	-0.5	-0.2	0.0	0.2
FTD	11AUG91:23:08	35.50	90.75	-	-	0	13.7	11.4	12.1	13.9	14.6	15.2	15.6	3.1	1.0	2.91	-0.27	-1.0	-	-	-	-0.7	-0.4	-0.1	0.1	0.5
FTD	11AUG91:23:10	38.00	90.75	-	-	0	14.6	12.5	13.2	14.8	15.2	15.5	15.8	2.3	0.7	2.54	-0.64	-0.7	-	-	-	-0.6	-0.2	0.0	0.2	0.6
FTD	11AUG91:23:12	40.50	90.75	-	-	0	14.1	12.1	12.6	14.3	14.4	15.6	16.0	3.0	1.0	2.87	-0.15	-1.0	-	-	-	-0.6	-0.2	-0.0	0.1	0.3
FTD	11AUG91:23:14	43.00	90.75	-	-	0	14.5	12.0	12.8	14.5	15.7	16.1	16.3	3.2	1.1	2.94	-0.16	-1.1	-	-	-	-0.5	-0.1	0.0	0.1	0.3
FTD	11AUG91:23:15	45.50	90.75	-	-	0	14.7	12.0	12.9	14.5	16.3	16.6	16.9	3.7	1.3	3.04	0.04	-1.4	-	-	-	-0.4	-0.1	0.0	0.1	0.3
FTD	11AUG91:23:17	48.00	90.75	-	-	0	14.2	11.4	12.0	14.4	15.8	16.1	16.4	4.1	1.4	3.11	-0.25	-1.4	-	-	-	-0.6	-0.3	0.0	0.1	0.3
FTD	11AUG91:23:18	50.50	90.75	-	-	0	13.9	10.5	11.6	14.1	15.8	16.0	16.3	4.4	1.5	3.24	-0.23	-1.2	-	-	-	-0.7	-0.1	0.0	0.1	0.5
FTD	11AUG91:23:21	53.00	90.75	-	-	0	14.0	10.7	11.8	14.3	14.3	16.0	16.5	4.3	1.4	3.23	-0.25	-1.0	-	-	-	-0.8	-0.6	-0.1	0.0	0.6
FTD	11AUG91:23:22	55.50	90.75	-	-	0	14.7	11.8	12.9	14.9	15.1	16.3	16.8	3.6	1.1	3.04	-0.31	-0.8	-	-	-	-0.8	-0.4	-0.1	0.0	0.3
FTD	12AUG91:00:45	23.00	90.75	-	-	0	13.0	10.9	11.4	12.2	11.7	16.7	17.8	5.3	1.7	3.03	1.01	-0.1	-	-	-	-0.9	-0.8	-0.5	-0.1	0.4
FTD	12AUG91:00:47	25.50	90.75	-	-	0	12.7	10.6	11.0	12.2	11.2	16.1	17.2	5.1	1.6	3.17	0.89	-0.2	-	-	-	-0.8	-0.6	-0.3	-0.1	0.2
FTD	12AUG91:00:49	28.00	90.75	-	-	0	12.6	10.6	11.0	12.0	11.5	15.4	17.0	4.4	1.5	3.12	0.83	-0.4	-	-	-	-0.6	-0.5	-0.3	-0.1	0.0
FTD	12AUG91:00:51	30.50	90.75	-	-	0	13.8	11.6	12.1	13.8	12.2	16.4	17.8	4.3	1.4	3.18	0.53	-0.6	-	-	-	-1.0	-0.5	-0.3	0.1	0.4
FTD	12AUG91:00:54	33.00	90.75	-	-	0	13.9	12.0	12.6	13.7	12.6	16.3	17.4	3.8	1.2	2.99	0.67	-0.6	-	-	-	-0.9	-0.6	-0.1	0.1	0.4
FTD	12AUG91:00:56	35.50	90.75	-	-	0	13.7	12.2	12.6	13.5	13.1	16.1	16.9	3.6	1.1	2.84	1.14	0.4	-	-	-	-0.8	-0.5	-0.1	0.1	0.3
FTD	12AUG91:00:58	38.00	90.75	-	-	0	13.7	12.0	12.5	13.5	13.0	15.5	16.6	3.1	0.9	2.84	0.76	-0.0	-	-	-	-0.6	-0.3	0.0	0.1	0.3
FTD	12AUG91:01:01	40.50	90.75	-	-	0	13.2	11.3	11.9	13.2	12.2	14.9	15.4	3.0	0.9	2.90	0.19	-1.1	-	-	-	-0.4	-0.2	-0.1	0.1	0.3
FTD	12AUG91:01:03	43.00	90.75	-	-	0	14.2	11.8	12.4	13.8	12.7	16.7	17.2	4.4	1.5	3.16	0.38	-1.3	-	-	-	-0.6	-0.1	0.1	0.2	0.4
FTD	12AUG91:01:10	50.50	90.75	-	-	0	14.2	11.4	12.3	14.2	12.6	16.6	17.6	4.3	1.5	3.26	0.24	-1.1	-	-	-	-0.8	-0.3	-0.1	0.1	0.3
FTD	12AUG91:01:12	53.00	90.75	-	-	0	14.1	11.6	12.5	13.9	12.9	16.7	17.8	4.2	1.3	3.21	0.49	-0.8	-	-	-	-0.7	-0.3	-0.1	0.1	0.2
FTD	12AUG91:02:49	23.00	90.75	-	-	0	13.7	12.7	13.0	13.4	13.2	16.0	16.8	3.0	0.9	2.47	1.48	1.3	-	-	-	-0.7	-0.6	-0.3	-0.1	0.2
FTD	12AUG91:02:51	25.50	90.75	-	-	0	13.8	12.4	12.8	13.6	13.3	16.0	17.0	3.2	0.9	2.74	1.21	1.0	-	-	-	-0.6	-0.4	-0.2	0.1	0.2
FTD	12AUG91:02:53	28.00	90.75	-	-	0	13.9	12.4	13.0	13.7	13.7	15.4	16.5	2.4	0.7	2.57	1.02	0.7	-	-	-	-0.5	-0.3	-0.2	0.0	0.2
FTD	12AUG91:02:55	30.50	90.75	-	-	0	14.1	12.7	13.2	14.0	13.4	15.9	16.9	2.7	0.9	2.69	0.89	0.1	-	-	-	-0.6	-0.3	-0.1	0.1	0.2
FTD	12AUG91:02:57	33.00	90.75	-	-	0	14.1	12.5	13.0	14.0	13.5	15.9	16.8	2.8	0.9	2.72	0.56	-0.6	-	-	-	-0.6	-0.4	-0.1	0.1	0.2
FTD	12AUG91:02:59	35.50	90.75	-	-	0	14.1	12.5	13.2	14.0	13.7	15.7	16.4	2.6	0.7	2.62	0.75	-0.1	-	-	-	-0.5	-0.2	-0.1	0.1	0.2
FTD	12AUG91:03:01	38.00	90.75	-	-	0	13.9	12.5	12.9	13.8	13.2	15.6	16.0	2.4	0.8	2.66	0.50	-0.8	-	-	-	-0.4	-0.2	-0.1	0.1	0.4
FTD	12AUG91:03:03	40.50	90.75	-	-	0	13.7	11.6	12.2	13.9	12.4	15.3	15.8	3.1	1.0	2.90	-0.03	-1.3	-	-	-	-0.4	-0.2	0.0	0.2	0.4
FTD	12AUG91:03:05	43.00	90.75	-	-	0	13.9	11.6	12.1	13.8	12.9	16.0	16.5	3.9	1.3	3.11	0.14	-1.3	-	-	-	-0.5	-0.2	0.1	0.2	0.4
FTD	12AUG91:03:07	45.50	90.75	-	-	0	14.2	11.5	12.6	13.8	13.2	16.2	16.7	3.6	1.2	2.98	0.38	-1.2	-	-	-	-0.4	-0.1	0.1	0.1	0.4
FTD	12AUG91:03:09	48.00	90.75	-	-	0	14.0	11.2	12.1	14.2	15.3	16.1	16.8	4.0	1.4	3.16	-0.04	-1.4	-	-	-	-0.6	-0.2	0.0	0.1	0.4
FTD	12AUG91:03:11	50.50	90.75	-	-	0	14.2	10.7	12.0	14.5	15.1	16.1	16.5	4.0	1.3	3.16	-0.28	-1.2	-	-	-	-0.6	-0.1	0.1	0.2	0.3
FTD	12AUG91:03:13	53.00	90.75	-	-	0	14.2	10.7	12.1	14.5	14.9	16.1	17.0	4.0	1.3	3.20	-0.13	-1.1	-	-	-	-0.4	-0.6	-0.1	0.1	0.2

UNWEAVERD : FAR-IR

41-2031 - FBI - 10

WAVEBAND : FAR-IR																								
SITE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	BOA	RAZ (Deg.)	MINIMUM (Deg.)	PERC. OS (Deg.)	MEDIAN (Deg.)	MODE (Deg.)	PERC. 95 (Deg.)	MAXIMUM (Deg.)	RNG. 90 (Deg.)	SO (Deg.)	ENTROPY (Dimensionless)	SKETCHES (Dimensionless)	KURTOSIS (Dimensionless)	CLUSTER (Deg.)	RETICULOS (Dimensionless)	CNT. 05 (Deg.)	CNT. 25 (Deg.)	CNT. 50 (Deg.)	CNT. 75 (Deg.)	CNT. 95 (Deg.)	
YPG	13SEP00:03:04	192.50	91.33	-	0	29.9	27.9	28.7	30.1	30.1	31.0	31.3	2.3	0.7	2.52	-0.40	0.0	0.6	0.21	-0.4	-0.1	0.1	0.2	0.4
YPG	13SEP00:03:09	195.00	91.33	-	0	29.9	27.8	28.8	30.8	31.1	31.4	31.3	2.3	0.7	2.57	-0.01	-0.2	0.6	0.19	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:03:13	197.50	91.33	-	0	29.6	27.7	28.5	29.7	29.0	30.9	31.3	2.4	0.7	2.57	0.14	-0.2	0.6	0.24	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:03:16	200.00	91.33	-	0	29.4	27.5	28.4	29.4	29.5	30.6	31.0	2.2	0.7	2.53	0.08	0.0	0.5	0.22	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:03:21	202.83	91.33	-	0	29.9	27.6	28.8	29.9	30.0	31.1	31.5	2.3	0.7	2.54	-0.18	0.9	0.5	0.25	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:03:25	235.33	92.33	-	0	29.3	26.5	27.4	29.3	28.9	31.2	31.6	3.9	1.1	3.00	-0.11	-0.3	0.8	0.22	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:03	157.00	91.33	-	0	28.5	25.7	27.1	28.5	28.7	30.0	31.6	3.0	1.0	2.92	0.17	-0.5	0.6	0.40	-0.4	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:06	159.50	91.33	-	0	28.3	25.8	26.8	28.3	27.9	30.3	31.6	3.5	1.1	3.02	0.31	-0.3	0.6	0.46	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:10	162.00	91.33	-	0	28.3	25.7	26.8	28.3	28.2	30.5	31.3	3.8	1.1	3.01	0.42	0.1	0.7	0.41	-0.4	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:13	164.50	91.33	-	0	28.3	25.9	26.8	28.4	29.0	30.0	31.0	3.2	1.0	2.86	0.27	0.4	0.7	0.30	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:17	167.00	91.33	-	0	28.1	25.9	26.7	28.2	28.0	29.4	30.8	2.6	0.8	2.75	-0.29	-0.3	0.7	0.13	-0.5	-0.1	0.1	0.2	0.7
YPG	13SEP00:04:20	169.50	91.33	-	0	28.2	25.9	26.8	28.2	27.9	29.4	30.9	2.6	0.8	2.75	-0.18	-0.4	0.7	0.11	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:24	172.00	91.33	-	0	28.2	25.9	26.9	28.2	28.2	29.6	30.8	2.6	0.8	2.81	0.14	-0.4	0.6	0.32	-0.4	-0.1	0.1	0.2	0.6
YPG	13SEP00:04:27	190.00	91.33	-	0	28.4	26.3	27.1	28.3	27.7	30.4	30.8	3.2	1.0	2.87	0.62	-0.3	0.7	0.32	-0.3	-0.1	0.1	0.2	0.5
YPG	13SEP00:04:31	192.50	91.33	-	0	28.6	26.3	27.3	28.6	28.4	30.4	31.1	3.1	1.0	2.87	0.49	0.0	0.8	0.10	-0.5	-0.2	0.1	0.3	0.5
YPG	13SEP00:04:34	195.00	91.33	-	0	28.4	26.6	27.4	28.4	27.9	30.3	30.6	2.8	0.8	2.71	0.71	-0.0	0.7	0.14	-0.4	-0.1	0.1	0.2	0.4
YPG	13SEP00:04:38	197.50	91.33	-	0	28.3	26.4	27.3	28.3	28.5	30.1	30.5	2.8	0.8	2.72	0.43	-0.0	0.8	0.07	-0.3	-0.1	0.1	0.2	0.5
YPG	13SEP00:04:41	200.00	91.33	-	0	28.3	26.2	27.2	28.4	28.5	29.9	30.5	2.7	0.8	2.71	0.39	0.1	0.7	0.12	-0.3	-0.1	0.1	0.2	0.5
YPG	13SEP00:04:45	202.83	91.33	-	0	28.6	26.3	27.6	28.7	28.4	30.0	30.5	2.4	0.7	2.56	0.33	0.6	0.6	0.23	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:04:49	235.33	92.33	-	0	28.1	25.2	26.2	28.2	28.5	30.4	30.8	4.2	1.1	3.00	0.10	0.2	0.8	0.30	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:05:48	157.00	91.33	-	0	27.4	24.8	25.9	27.5	27.6	28.8	30.4	2.9	0.9	2.87	-0.04	-0.4	0.6	0.36	-0.4	-0.1	0.1	0.2	0.6
YPG	13SEP00:05:51	159.50	91.33	-	0	27.7	26.8	26.1	27.7	28.0	29.6	30.7	3.5	1.1	3.00	0.22	-0.4	0.6	0.47	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:05:54	162.00	91.33	-	0	27.7	25.1	26.1	27.8	28.3	29.6	30.2	3.5	1.0	2.96	0.10	-0.1	0.6	0.39	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:05:57	164.50	91.33	-	0	27.7	25.2	26.1	27.9	28.1	29.2	30.1	3.1	0.9	2.81	-0.15	0.3	0.6	0.32	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:06:00	167.00	91.33	-	0	27.8	25.5	26.3	28.0	28.1	28.9	29.6	2.5	0.7	2.63	-0.70	0.1	0.7	0.12	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:06:03	169.50	91.33	-	0	27.9	25.5	26.3	27.9	27.9	29.1	30.0	2.8	0.8	2.74	-0.39	-0.3	0.7	0.19	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:06:06	172.00	91.33	-	0	28.5	25.8	26.9	28.6	28.6	30.0	31.1	3.1	1.0	2.93	-0.23	-0.4	0.7	0.31	-0.5	-0.2	0.1	0.3	0.6
YPG	13SEP00:06:09	190.00	91.33	-	0	28.2	25.9	26.7	28.2	28.1	29.8	30.0	3.1	1.0	2.89	0.06	-0.9	0.6	0.43	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:06:12	192.50	91.33	-	0	28.3	26.1	27.0	28.3	28.3	29.8	30.2	2.9	0.9	2.79	0.15	-0.6	0.6	0.32	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:06:15	195.00	91.33	-	0	28.4	26.2	27.2	28.4	28.5	29.9	30.8	2.7	0.8	2.74	0.34	-0.6	0.6	0.27	-0.4	-0.1	0.1	0.2	0.4
YPG	13SEP00:06:18	197.50	91.33	-	0	28.4	26.2	27.1	28.5	28.8	29.9	30.2	2.7	0.8	2.74	0.02	-0.4	0.6	0.27	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:06:21	200.00	91.33	-	0	28.5	26.0	27.2	28.6	28.7	29.9	30.3	2.7	0.8	2.74	-0.18	-0.1	0.6	0.26	-0.4	-0.1	0.1	0.2	0.5
YPG	13SEP00:06:24	202.83	91.33	62.43	2	28.8	26.3	27.7	28.9	29.0	29.9	30.3	2.3	0.7	2.54	-0.59	1.1	0.5	0.28	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:06:27	235.33	92.33	30.36	1	27.9	24.8	25.8	28.0	28.1	29.7	30.3	3.9	1.1	3.03	-0.30	-0.2	0.8	0.31	-0.5	-0.1	0.1	0.2	0.6
YPG	13SEP00:07:49	157.00	91.33	118.06	3	30.6	28.6	29.8	30.6	30.5	31.7	33.4	1.9	0.6	2.38	0.94	2.4	0.5	0.13	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:07:55	159.50	91.33	116.21	3	31.0	29.4	30.2	31.0	31.0	31.9	32.9	1.7	0.5	2.26	0.30	0.8	0.4	0.13	-0.3	-0.1	0.1	0.2	0.4
YPG	13SEP00:08:00	162.00	91.33	114.38	3	31.1	29.8	30.4	31.1	31.1	32.0	33.7	1.6	0.6	2.25	1.01	3.0	0.5	0.94	-0.3	-0.1	0.1	0.2	0.4

		UNIVERSITY : FBI - IN															
TIME	TIME	ALTIMETER		ELEVATION		NOISE		NOISE		NOISE		NOISE		NOISE		NOISE	
		(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)	(Degrees)
11:00	11:00	164.50	91.33	112.57	3	31.4	30.8	30.8	31.4	31.4	32.5	33.7	1.7	0.6	2.31	0.83	1.4
11:01	11:01	167.00	91.33	110.79	3	32.2	30.2	31.1	32.3	32.4	33.6	35.0	2.5	0.8	2.72	0.36	0.3
11:02	11:02	169.50	91.33	109.03	3	32.7	30.9	31.9	32.7	32.7	33.6	35.1	1.8	0.6	2.61	0.29	0.9
11:03	11:03	172.00	91.33	107.30	3	33.8	31.4	32.1	33.1	33.0	34.3	35.5	2.1	0.7	2.55	0.50	0.4
11:04	11:04	190.00	91.33	105.61	3	33.4	31.6	32.7	33.4	33.3	34.2	35.5	1.5	0.5	2.55	-0.63	1.4
11:05	11:05	192.50	91.33	103.92	3	33.4	31.6	32.9	33.4	33.3	34.1	35.5	1.1	0.4	2.04	-0.23	1.9
11:06	11:06	164.50	91.33	121.06	3	30.8	36.4	35.2	37.9	37.8	41.1	42.5	5.9	1.8	3.54	0.20	-0.8
11:07	11:07	166.50	91.33	120.49	3	30.8	35.8	36.2	38.3	37.4	41.4	43.1	5.4	1.8	3.48	0.34	-0.9
11:08	11:08	169.50	91.33	119.53	3	30.9	35.8	36.8	38.7	37.0	41.7	43.1	4.9	1.7	3.37	0.32	-1.1
11:09	11:09	172.00	91.33	118.43	3	30.9	34.9	36.6	38.8	37.1	41.8	43.2	5.2	1.8	3.46	0.30	-0.8
11:10	11:10	190.00	91.33	117.34	3	30.1	35.8	37.0	39.1	37.6	41.9	43.3	4.9	1.7	3.39	0.29	-0.8
11:11	11:11	192.50	91.33	107.95	3	30.5	36.1	36.8	38.0	36.8	41.9	43.3	5.1	1.8	3.24	0.82	-0.5
11:12	11:12	195.00	91.33	106.04	3	30.2	36.3	36.8	38.0	36.8	41.3	43.0	4.5	1.4	3.08	1.22	1.1
11:13	11:13	197.50	91.33	104.10	3	30.4	36.4	36.9	38.3	37.9	41.0	42.8	4.1	1.4	3.13	0.84	0.2
11:14	11:14	200.00	91.33	102.18	3	30.8	36.7	37.2	38.7	38.3	41.9	44.7	4.7	1.7	3.27	1.53	3.4
11:15	11:15	202.00	91.33	100.42	3	30.0	36.8	37.4	38.7	38.1	41.7	45.6	4.1	1.4	3.12	1.44	2.5
11:16	11:16	204.00	91.33	103.40	3	30.8	36.9	37.6	38.7	38.1	41.7	45.6	4.1	1.4	3.12	1.44	2.5
11:17	11:17	206.00	91.33	101.72	3	42.9	37.4	38.4	43.2	38.4	50.4	51.8	11.9	4.3	3.85	0.58	-0.4
11:18	11:18	208.00	91.33	119.31	3	41.9	37.9	39.4	41.9	40.7	45.1	49.2	5.7	2.5	3.33	0.29	-1.8
11:19	11:19	210.00	91.33	119.83	3	41.9	37.7	39.2	41.9	39.7	45.1	47.3	5.9	2.5	3.41	0.16	-1.1
11:20	11:20	212.00	91.33	118.77	3	41.7	37.7	38.9	41.7	39.7	45.3	46.8	6.4	2.8	3.46	0.27	-1.1
11:21	11:21	214.00	91.33	118.54	3	41.7	37.6	38.6	41.6	39.8	45.5	47.1	6.9	2.4	3.71	0.26	-1.1
11:22	11:22	216.00	91.33	118.28	3	42.8	38.3	39.1	42.0	39.4	45.7	46.9	6.6	2.4	3.62	0.25	-1.3
11:23	11:23	218.00	91.33	118.11	3	42.8	37.1	38.9	42.1	39.5	45.8	47.4	6.9	2.4	3.74	0.20	-1.0
11:24	11:24	220.00	91.33	117.96	3	42.4	38.0	39.4	42.6	39.9	46.0	47.6	6.6	2.3	3.69	0.25	-0.9
11:25	11:25	222.00	91.33	116.49	3	41.1	38.2	38.7	40.3	38.7	45.9	47.4	7.2	2.5	3.52	0.93	-0.3
11:26	11:26	224.00	91.33	116.33	3	40.7	38.3	38.9	40.3	38.9	44.8	47.3	5.8	1.9	3.29	1.33	1.3
11:27	11:27	226.00	91.33	116.21	3	40.9	38.6	39.0	40.6	38.9	44.3	46.3	5.2	1.7	3.34	0.09	0.2
11:28	11:28	228.00	91.33	116.19	3	41.3	38.3	39.1	40.9	40.4	45.5	50.6	6.4	2.2	3.53	1.52	2.8
11:29	11:29	230.00	91.33	116.13	3	41.5	38.8	39.4	41.1	40.1	45.1	50.5	5.6	2.0	3.47	1.41	2.8
11:30	11:30	232.00	91.33	116.03	3	41.1	38.3	39.4	40.6	39.8	44.7	49.8	5.2	1.9	3.35	1.67	3.4
11:31	11:31	234.00	91.33	106.30	3	45.1	39.1	39.8	45.3	39.6	52.7	54.6	12.9	4.1	4.16	0.46	-0.6
11:32	11:32	236.00	91.33	105.12	3	45.1	40.4	41.8	45.1	43.1	48.3	53.4	6.5	2.4	3.71	0.29	-0.2
11:33	11:33	238.00	91.33	105.61	3	44.9	39.7	41.5	44.7	42.9	48.5	52.2	7.0	2.6	3.75	0.13	-1.1
11:34	11:34	240.00	91.33	106.16	3	44.7	40.1	41.4	44.6	42.3	48.6	49.9	7.2	2.5	3.75	0.25	-1.2
11:35	11:35	242.00	91.33	106.77	3	45.2	40.6	41.9	45.1	42.5	49.2	54.6	7.3	2.5	3.73	0.31	-0.9
11:36	11:36	244.00	91.33	107.34	3	45.4	41.2	42.2	45.4	42.8	49.5	54.8	7.2	2.6	3.71	0.44	-0.6
11:37	11:37	246.00	91.33	107.86	3	45.4	41.2	42.2	45.4	42.8	49.5	54.8	7.2	2.6	3.71	0.44	-0.6

TIME		UNIFORMITY : FPM-12																																																																																																																																																																																																																																																																																	
SITE	TIME	AZIMUTH (Degrees)		ELEVATION (Degrees)	SOLAR (Degrees)	RELATIVE HUMIDITY (%)	WIND (m/s)	TEMPERATURE (C)	PRESSURE (hPa)	WIND DIRECTION (Degrees)	WIND SPEED (m/s)	WIND GUST (m/s)	WIND CHILL (C)	WIND HEAT INDEX (C)	WIND COMFORT INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND PERCEIVED INDEX (C)	WIND

UNIVERSITY : FAR-IR														
DATE	TIME	ALTIMETER (Degrees)	ELEVATION (Degrees)	BIRD	SEA	MINIMUM (Degrees)	MAXIMUM (Degrees)	INDIAN (Degrees)	PERCENT (Degrees)	MOON (Degrees)	RAIL (Degrees)	RAILWAY (Degrees)	RAILWAY (Degrees)	RAILWAY (Degrees)
1996	13SEP00:20:00	157.00	91.33	-	0	41.0	38.4	39.8	41.1	42.4	43.8	2.6	0.8	2.76
1996	13SEP00:20:05	159.50	91.33	-	0	40.9	38.9	39.8	41.0	41.9	43.0	2.0	0.7	2.56
1996	13SEP00:20:10	162.00	91.33	-	0	41.0	39.1	39.9	41.1	41.7	42.0	43.3	2.0	0.7
1996	13SEP00:20:15	164.50	91.33	-	0	40.9	39.0	39.7	40.9	41.7	43.0	2.2	0.7	2.56
1996	13SEP00:20:20	167.00	91.33	-	0	40.9	39.0	39.8	41.0	41.5	41.8	43.1	2.0	0.7
1996	13SEP00:20:25	169.50	91.33	-	0	41.1	39.2	40.0	41.3	41.8	42.1	44.5	2.1	0.8
1996	13SEP00:20:30	172.00	91.33	-	0	41.5	39.4	40.1	41.8	42.1	42.2	44.2	2.1	0.7
1996	13SEP00:20:35	174.50	91.33	-	0	41.4	39.4	40.2	41.6	41.7	42.2	42.2	2.0	0.7
1996	13SEP00:20:40	177.00	91.33	-	0	41.4	39.5	40.4	41.6	41.8	42.1	42.2	1.7	0.6
1996	13SEP00:20:45	179.50	91.33	-	0	41.1	39.0	39.9	41.2	41.6	41.8	42.2	1.9	0.6
1996	13SEP00:20:50	182.00	91.33	-	0	41.1	38.8	39.9	41.3	41.6	41.8	42.1	1.9	0.6
1996	13SEP00:20:55	184.50	91.33	-	0	41.1	38.6	40.0	41.4	41.5	41.8	42.0	1.7	0.6
1996	13SEP00:21:00	187.00	91.33	-	0	40.2	37.9	38.7	40.2	41.1	41.7	41.9	3.0	0.9
1996	13SEP00:21:05	189.50	91.33	-	0	36.8	36.4	35.9	36.9	36.7	37.5	38.6	1.6	0.5
1996	13SEP00:21:10	192.00	91.33	-	0	37.1	35.1	36.2	37.2	37.5	37.9	39.2	1.7	0.5
1996	13SEP00:21:15	194.50	91.33	-	0	37.1	35.3	36.1	37.1	37.7	37.9	39.1	1.9	0.6
1996	13SEP00:21:20	197.00	91.33	-	0	37.2	35.5	36.3	37.3	37.8	38.1	39.1	1.8	0.6
1996	13SEP00:21:25	199.50	91.33	-	0	37.4	35.6	36.4	37.5	37.9	38.1	40.1	1.8	0.6
1996	13SEP00:21:30	202.00	91.33	-	0	37.3	35.5	36.4	37.4	37.9	38.1	40.0	1.7	0.6
1996	13SEP00:21:35	204.50	91.33	-	0	37.7	35.7	36.4	37.9	38.1	38.6	40.6	2.0	0.6
1996	13SEP00:21:40	207.00	91.33	-	0	37.8	35.8	36.8	38.0	38.0	38.5	40.7	1.8	0.5
1996	13SEP00:21:45	209.50	91.33	-	0	37.6	35.7	36.6	37.7	37.9	38.2	38.4	1.7	0.5
1996	13SEP00:21:50	212.00	91.33	-	0	37.7	35.8	36.6	37.9	38.1	38.6	38.7	1.8	0.5
1996	13SEP00:21:55	214.50	91.33	-	0	37.6	35.7	36.6	37.8	37.9	38.2	38.5	1.5	0.5
1996	13SEP00:22:00	217.00	91.33	-	0	37.7	35.5	36.4	37.9	37.9	38.3	38.5	1.5	0.5
1996	13SEP00:22:05	219.50	91.33	-	0	37.1	34.8	35.6	37.1	37.9	38.4	38.8	2.7	0.8
1996	13SEP00:22:10	222.00	91.33	-	0	33.9	32.3	32.9	33.9	33.4	34.9	35.4	2.1	0.7
1996	13SEP00:22:15	224.50	91.33	-	0	33.8	32.0	32.8	34.0	34.3	34.6	35.6	1.8	0.6
1996	13SEP00:22:20	227.00	91.33	-	0	34.4	32.8	33.6	34.5	34.2	35.2	36.3	1.6	0.5
1996	13SEP00:22:25	229.50	91.33	-	0	34.5	33.0	33.7	34.5	34.4	35.3	36.3	1.6	0.5
1996	13SEP00:22:30	232.00	91.33	-	0	34.5	33.0	33.6	34.6	35.0	35.4	36.2	1.7	0.6
1996	13SEP00:22:35	234.50	91.33	-	0	34.5	32.9	33.6	34.7	34.8	35.1	36.7	1.6	0.5
1996	13SEP00:22:40	237.00	91.33	-	0	34.6	32.9	33.7	34.8	34.9	35.3	36.8	1.6	0.5
1996	13SEP00:22:45	239.50	91.33	-	0	34.8	33.0	33.7	35.1	35.2	35.4	35.6	1.7	0.5
1996	13SEP00:22:50	242.00	91.33	-	0	34.9	33.2	34.0	35.0	35.2	35.3	35.4	1.3	0.4
1996	13SEP00:22:55	244.50	91.33	-	0	34.9	33.2	34.0	35.0	35.2	35.3	35.4	1.3	0.4

WAVEBAND : FMC-12																							
TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BOIN (Degrees)	BOA	MEAN (Deg. C)	MINIMUM (Deg. C)	PERC. 05 (Deg. C)	MEDIAN (Deg. C)	MODE (Deg. C)	PERC. 95 (Deg. C)	MAXIMUM (Deg. C)	RMG. 90 (Deg. C)	SD (Deg. C)	ENTROPY (Dimensionless)	SKELNESS (Dimensionless)	KLARSIS (Dimensionless)	CLUSTER (Deg. C)	THRESHOLD (Dimensionless)	CMT. 05 (Deg. C)	CMT. 25 (Deg. C)	CMT. 50 (Deg. C)	CMT. 75 (Deg. C)	CMT. 95 (Deg. C)
2118																							
13SEP90:23:54	195.00	91.33		0	34.8	33.3	34.8	34.9	35.1	35.2	35.4	1.2	0.4	1.91	-1.21	1.1	0.4	0.12	-0.3	-0.1	0.1	0.1	0.2
13SEP90:23:54	197.50	91.33		0	35.3	33.8	34.3	35.4	35.5	35.7	35.9	1.4	0.4	1.95	-1.19	0.6	0.4	0.15	-0.3	-0.1	0.1	0.1	0.3
13SEP90:23:59	200.00	91.33		0	35.3	33.8	34.5	35.5	35.7	35.8	36.0	1.4	0.4	2.00	-1.10	0.7	0.4	0.14	-0.3	-0.1	0.1	0.1	0.3
14SEP90:00:02	202.03	91.33		0	35.4	33.5	34.4	35.5	35.6	35.8	36.0	1.2	0.4	1.88	-1.40	3.8	0.3	0.35	-0.2	-0.1	0.1	0.1	0.3
14SEP90:00:04	205.33	92.33		0	35.8	33.1	33.8	35.1	35.7	36.1	36.7	2.4	0.7	2.57	-0.47	-0.4	0.5	0.25	-0.4	-0.1	0.1	0.2	0.4

[illegible]

TIME		UNIVERSAND : MID-EXPOS																				
		RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	RA (deg)	DEC (deg)	
APC	2004091:00:26	37.00	91.17	100.46	3	13.2	11.9	12.3	13.4	13.7	14.2	14.6	2.8	0.7	2.47	-0.07	-1.2	0.7	-0.4	-0.3	-0.1	0.0
APC	2004091:00:39	39.50	91.17	102.31	3	12.6	10.7	11.7	12.8	13.3	13.6	14.1	2.8	0.7	2.44	-0.11	-1.2	0.7	0.03	-0.4	-0.1	0.0
APC	2004091:00:42	42.00	91.17	103.71	3	13.5	10.8	12.4	13.4	14.8	14.5	15.2	2.0	0.7	2.55	-0.43	-0.2	0.7	-0.02	-0.5	-0.2	0.0
APC	2004091:00:44	44.50	91.17	105.27	3	12.2	9.8	11.2	12.3	12.6	13.1	13.4	1.9	0.7	2.44	-1.54	4.3	0.7	-0.11	-0.8	-0.1	0.0
APC	2004091:00:49	47.00	91.17	106.60	3	11.4	9.5	10.5	11.4	10.9	12.5	10.1	2.8	0.7	2.50	1.03	6.7	0.6	0.03	-0.4	-0.2	0.0
APC	2004091:00:53	49.50	91.17	108.11	3	13.2	10.8	12.4	13.5	13.5	14.8	14.7	1.6	0.5	2.35	-0.20	-0.8	0.5	0.06	-0.4	-0.1	0.1
APC	2004091:00:56	52.00	91.17	109.37	3	13.4	10.4	12.5	13.4	13.3	14.4	15.0	1.9	0.7	2.47	-0.78	2.4	0.5	0.22	-0.4	-0.1	0.1
APC	2004091:00:58	54.50	91.17	110.82	3	14.2	11.3	12.5	14.2	14.2	15.5	16.0	3.0	0.8	2.67	-0.84	1.7	0.8	0.04	-0.4	-0.0	0.0
APC	2004091:00:59	57.00	91.17	112.23	3	14.1	11.3	12.5	14.2	14.1	15.1	15.7	2.5	0.7	2.55	-1.18	2.1	0.7	0.02	-0.5	-0.2	0.0
APC	2004091:00:06	59.50	91.17	113.37	3	14.1	11.3	12.5	14.2	14.1	15.1	15.7	2.5	0.7	2.70	-1.27	2.1	0.8	0.05	-0.4	-0.1	0.0
APC	2004091:00:10	62.00	91.17	114.72	3	14.8	11.8	12.1	14.2	14.4	15.2	15.9	3.1	0.9	2.76	-0.96	1.3	0.9	0.06	-0.4	-0.1	0.0
APC	2004091:00:13	64.50	91.17	115.79	3	13.8	9.9	10.9	13.0	12.8	14.2	14.5	3.3	0.9	2.76	-0.96	1.3	0.9	0.06	-0.4	-0.1	0.0
APC	2004091:00:17	67.00	91.17	117.05	3	13.8	10.4	11.7	14.1	14.7	15.1	15.5	3.4	1.0	2.76	-0.95	0.8	1.0	0.01	-0.3	-0.1	0.0
APC	2004091:00:20	69.50	91.17	118.85	3	12.6	9.4	10.5	12.9	13.1	13.9	14.5	3.5	1.0	2.73	-1.04	1.5	0.9	0.05	-0.3	-0.1	0.0
APC	2004091:00:24	72.00	91.17	119.22	3	13.0	9.5	10.4	13.2	12.5	14.5	10.5	4.1	1.1	2.86	-0.67	1.5	1.1	0.01	-0.4	-0.1	0.1
APC	2004091:00:27	74.50	91.17	120.34	3	13.7	10.4	11.9	13.8	14.5	15.1	16.8	3.2	1.1	2.86	-0.71	0.8	1.5	0.08	-0.3	-0.1	0.0
APC	2004091:00:30	77.00	91.17	121.21	3	13.2	9.7	10.5	13.3	14.3	14.6	15.2	4.1	1.2	2.85	-1.12	1.3	1.2	0.00	-0.2	0.0	0.1
APC	2004091:00:33	79.50	91.17	122.27	3	14.8	10.5	11.1	14.1	14.8	15.3	15.7	4.2	1.1	2.79	-1.27	1.6	1.1	-0.02	-0.3	-0.1	0.0
APC	2004091:00:37	82.00	91.17	123.02	3	13.5	10.0	11.8	13.3	14.2	15.5	16.4	3.7	1.2	3.07	0.18	-0.5	1.1	0.12	-0.4	-0.1	0.0
APC	2004091:00:41	84.50	91.17	123.98	3	13.3	9.7	10.1	13.4	14.1	15.9	16.9	5.8	1.5	3.20	-0.29	-0.0	1.6	-0.06	-0.6	-0.2	0.0
APC	2004091:00:44	87.00	91.17	124.65	3	13.5	9.6	10.1	13.7	13.8	14.7	15.0	4.3	1.2	2.90	-1.11	0.6	1.3	-0.05	-0.4	-0.1	0.0
APC	2004091:00:48	89.50	91.17	125.52	3	13.5	9.6	10.1	13.7	13.8	14.7	15.0	4.3	1.2	2.90	-1.11	0.6	1.0	0.08	-0.3	-0.1	0.0
APC	2004091:00:51	91.00	91.17	126.45	3	13.5	9.6	10.1	13.7	13.8	14.7	15.0	4.3	1.2	2.90	-1.11	0.6	1.0	0.08	-0.3	-0.1	0.0
APC	2004091:00:54	93.00	91.17	127.68	2	1.9	15.6	16.2	17.8	17.0	19.7	20.6	3.6	1.2	3.06	0.08	-1.2	1.2	0.02	-0.4	-0.2	0.0
APC	2004091:00:57	95.00	91.17	128.86	2	18.8	15.6	16.1	18.0	19.3	19.9	21.6	3.8	1.3	3.11	0.01	-1.3	1.2	0.05	-0.7	-0.2	0.0
APC	2004091:01:00	97.00	91.17	130.01	2	18.8	14.1	16.8	18.9	20.3	20.9	22.6	4.1	1.4	3.26	-0.10	-0.9	1.4	-0.02	-1.0	-0.3	0.0
APC	2004091:01:03	99.50	91.17	131.15	2	19.7	15.0	18.1	19.9	20.1	21.5	22.7	3.4	1.2	3.12	-0.61	0.8	1.3	-0.08	-1.2	-0.3	0.0
APC	2004091:01:06	101.00	91.17	132.28	2	19.4	16.7	18.1	19.5	18.4	20.9	22.4	2.8	1.0	2.87	0.53	1.8	1.0	0.01	-0.6	-0.3	0.0
APC	2004091:01:09	103.00	91.17	133.38	2	19.9	17.3	18.6	20.0	20.8	21.4	22.8	2.8	0.9	2.86	0.12	-0.6	0.8	0.12	-0.5	-0.2	0.0
APC	2004091:01:12	105.00	91.17	134.26	2	19.5	16.4	18.1	19.5	19.2	21.5	22.7	3.4	1.2	3.00	-0.90	-0.0	3.5	0.8	0.27	-0.5	-0.1
APC	2004091:01:15	107.00	91.17	135.31	2	19.8	16.7	19.8	19.5	19.2	21.9	23.0	5.2	1.4	3.10	-1.09	2.6	1.4	0.02	-0.8	-0.2	0.0
APC	2004091:01:18	109.00	91.17	136.36	2	20.1	14.9	17.1	20.1	19.9	21.7	22.7	4.6	1.4	3.02	-1.46	3.2	1.3	0.01	-0.8	-0.2	0.0
APC	2004091:01:21	111.00	91.17	137.38	2	20.7	18.1	19.4	20.8	21.1	21.4	22.3	2.0	0.6	2.50	-1.63	4.0	0.6	-0.01	-0.5	-0.1	0.0
APC	2004091:01:24	113.00	91.17	138.40	2	19.9	14.5	16.4	20.3	20.7	21.8	22.8	5.4	1.4	3.12	-1.52	3.1	1.4	0.02	-0.8	-0.2	0.0
APC	2004091:01:27	115.00	91.17	139.39	2	21.0	15.6	17.6	21.2	20.4	23.0	23.6	5.5	1.5	3.22	-1.11	1.7	1.5	0.03	-0.6	-0.2	0.1
APC	2004091:01:30	117.00	91.17	140.37	3	19.3	13.8	15.6	20.0	20.6	21.1	21.7	5.5	1.7	3.04	-1.25	1.5	1.7	-0.01	-0.6	-0.1	0.1
APC	2004091:01:33	119.00	91.17	141.34	3	21.0	15.5	17.3	21.7	22.1	22.6	23.4	5.2	1.5	3.05	-1.54	2.5	1.6	-0.03	-0.6	-0.2	0.1
APC	2004091:01:36	121.00	91.17	142.28	3	20.1	14.8	16.2	20.4	21.5	22.2	26.2	5.9	1.7	3.25	-1.04	1.8	1.8	-0.02	-0.6	-0.2	0.1

WAVELENGTH : MID-IR(MOF)

MAVERAND : MID-IR(MOF)																								
SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BIRD (Degrees)	MEAN (Deg.)	MINIMUM (Deg.)	PERCENT (Deg.)	MEDIAN (Deg.)	MODE (Deg.)	PERCENT (Deg.)	MAXIMUM (Deg.)	RANGE (Deg.)	SD (Deg.)	ENTROPY (Dimensions)	SKEWNESS (Dimensions)	KURTOSIS (Dimensions)	CLUSTER (Deg.)	REYNOLDS (Dimensions)	CUT.05 (Deg.)	CUT.25 (Deg.)	CUT.50 (Deg.)	CUT.75 (Deg.)	CUT.95 (Deg.)	
APG	20MAR91:15:10	62.00	91.17	32.72	1	26.3	10.4	20.5	27.0	26.8	28.2	30.3	7.7	2.2	3.15	-2.71	7.6	2.2	-0.01	-1.4	-0.1	0.2	0.3	1.6
APG	20MAR91:15:14	64.50	91.17	32.56	1	25.4	7.7	19.7	26.1	26.6	27.1	28.1	7.4	2.2	3.07	-2.61	8.4	2.1	0.01	-1.2	-0.1	0.1	0.3	1.0
APG	20MAR91:15:17	67.00	91.17	32.50	1	24.1	7.8	17.6	25.0	25.1	25.8	26.4	8.2	2.3	2.95	-2.03	7.6	2.3	0.00	-1.0	-0.1	0.1	0.3	1.2
APG	20MAR91:15:20	69.50	91.17	32.55	1	23.6	5.6	16.7	24.3	24.1	25.5	26.3	8.8	2.3	2.96	-2.89	8.1	2.3	0.00	-1.0	-0.1	0.1	0.3	1.2
APG	20MAR91:15:23	72.00	91.17	32.70	1	23.3	3.1	14.7	23.8	23.3	24.0	24.7	11.3	3.3	3.28	-0.58	10.9	2.7	0.20	-1.3	-0.2	0.2	0.4	1.8
APG	20MAR91:15:26	74.50	91.17	32.95	1	24.0	7.9	15.6	24.8	24.8	26.1	28.8	10.6	2.7	3.26	-2.54	6.4	2.7	0.01	-0.8	-0.1	0.1	0.4	1.1
APG	20MAR91:15:29	77.00	91.17	33.05	1	23.3	10.6	14.1	24.2	24.5	25.6	26.3	11.6	2.9	3.16	-2.55	5.7	3.1	-0.07	-0.8	-0.1	0.1	0.4	1.4
APG	20MAR91:15:32	79.50	91.17	33.51	1	25.4	8.2	16.6	26.2	26.9	27.2	28.2	10.7	2.7	2.97	-2.70	6.4	2.9	-0.05	-0.9	-0.1	0.1	0.4	1.4
APG	20MAR91:15:35	82.00	91.17	34.06	1	22.5	10.5	18.3	22.9	22.8	23.5	24.5	7.2	2.1	3.50	-0.54	5.4	1.9	0.09	-0.8	-0.2	0.1	0.3	1.4
APG	20MAR91:15:38	84.50	91.17	34.70	1	25.1	10.5	16.1	25.9	26.1	28.5	30.3	12.4	3.1	3.38	-2.05	5.6	3.1	-0.07	-0.8	-0.1	0.1	0.6	1.3
APG	20MAR91:15:41	87.00	91.17	35.45	1	23.9	8.2	15.8	24.9	25.2	26.0	26.4	10.2	2.8	3.04	-2.22	3.7	3.0	-0.07	-0.8	-0.2	0.1	0.4	1.3
APG	20MAR91:15:45	89.50	91.17	36.28	1	22.9	7.9	20.1	22.9	23.0	25.0	26.6	5.4	2.1	3.38	-0.83	1.3	2.2	-0.05	-0.7	-0.1	0.1	0.3	0.7
APG	20MAR91:16:39	37.00	91.17	39.94	1	22.9	13.2	19.5	23.6	23.8	25.5	27.1	5.9	1.9	3.44	-0.83	-0.5	1.8	0.05	-1.0	-0.2	0.1	0.4	1.3
APG	20MAR91:16:42	39.50	91.17	38.07	1	19.0	11.6	15.4	19.7	20.0	21.8	31.0	6.5	2.2	3.54	-0.33	-0.3	2.2	-0.02	-1.1	-0.4	0.1	0.5	1.9
APG	20MAR91:16:46	42.00	91.17	36.20	1	15.1	5.4	13.5	15.2	16.6	17.1	24.3	3.6	1.2	3.09	-0.05	5.0	1.2	0.01	-0.5	-0.1	0.1	0.3	0.8
APG	20MAR91:16:50	44.50	91.17	34.31	1	17.4	8.0	15.7	17.4	17.2	19.8	27.0	4.2	1.5	3.22	0.20	6.7	1.5	-0.00	-0.9	-0.2	0.0	0.3	1.2
APG	20MAR91:16:54	47.00	91.17	32.40	1	9.8	6.8	8.3	9.9	10.6	11.6	25.7	3.3	1.3	3.05	2.95	20.5	1.6	-0.19	-0.7	-0.2	0.1	0.3	0.8
APG	20MAR91:16:58	49.50	91.17	30.48	1	7.4	4.4	5.7	7.5	7.6	9.0	15.5	3.3	1.1	3.03	0.75	3.0	0.8	0.30	-0.5	-0.2	0.1	0.2	0.7
APG	20MAR91:17:02	52.00	91.17	28.56	1	12.0	5.6	10.8	12.2	11.4	13.7	16.2	2.9	0.9	2.89	-0.31	1.7	0.8	0.21	-0.2	-0.1	0.0	0.2	0.5
APG	20MAR91:17:06	54.50	91.17	26.62	1	7.4	3.1	5.0	7.7	7.8	8.8	10.4	3.0	1.1	2.93	-1.27	2.5	1.0	0.04	-0.7	-0.2	-0.3	0.2	0.9
APG	20MAR91:17:10	57.00	91.17	24.67	1	13.3	4.4	11.2	13.8	13.8	15.1	16.8	3.8	1.4	2.99	-2.38	7.8	1.5	-0.17	-0.9	-0.1	0.1	0.3	1.3
APG	20MAR91:17:14	59.50	91.17	22.72	1	8.9	1.0	5.2	9.3	9.5	11.5	21.8	6.3	2.0	3.40	-1.09	5.9	2.0	-0.03	-1.2	-0.2	0.0	0.3	1.3
APG	20MAR91:17:18	62.00	91.17	20.76	1	11.0	-0.4	8.1	11.4	11.8	12.6	14.2	4.5	1.4	3.01	-2.43	7.6	1.5	-0.08	-1.0	-0.1	0.1	0.2	0.9
APG	20MAR91:17:22	64.50	91.17	18.73	1	14.8	5.9	12.0	15.0	14.9	17.0	18.3	4.9	1.5	3.12	-1.57	4.9	1.4	0.04	-0.9	-0.1	0.0	0.3	1.0
APG	20MAR91:17:26	67.00	91.17	16.77	1	16.3	6.7	12.7	16.3	16.0	19.4	20.7	6.7	2.0	3.33	-1.21	3.5	2.0	-0.03	-1.0	-0.1	0.1	0.3	1.2
APG	20MAR91:17:30	69.50	91.17	14.79	1	14.0	5.1	10.9	14.1	13.7	16.8	17.7	5.9	1.8	3.22	-1.06	3.0	1.8	-0.02	-0.8	-0.1	0.1	0.3	1.0
APG	20MAR91:17:34	72.00	91.17	12.81	1	6.7	1.4	6.7	6.6	6.6	9.0	21.8	4.4	2.2	3.39	-2.84	14.4	1.8	0.27	-1.1	-0.3	0.0	0.3	1.6
APG	20MAR91:17:38	74.50	91.17	10.84	1	10.7	6.2	9.0	10.9	11.4	12.6	17.0	3.5	1.3	3.14	-0.71	1.3	1.3	-0.02	-0.5	-0.1	0.1	0.3	0.8
APG	20MAR91:17:42	77.00	91.17	8.86	1	-5.5	6.1	7.6	9.8	10.1	11.2	16.1	3.6	1.1	3.06	-0.47	-0.2	1.2	-0.06	-0.4	-0.1	0.1	0.2	0.7
APG	20MAR91:17:46	79.50	91.17	6.90	1	2.5	-2.4	0.5	2.6	3.3	4.0	5.3	3.5	1.0	2.96	-0.67	0.6	1.0	0.04	-0.4	-0.1	0.0	0.2	0.6
APG	20MAR91:17:50	82.00	91.17	4.98	1	4.8	-6.6	2.3	4.8	5.3	8.3	11.2	5.9	1.8	3.31	0.77	2.2	1.3	0.25	-1.1	-0.2	0.0	0.3	1.1
APG	20MAR91:17:54	84.50	91.17	3.16	1	4.8	0.0	2.5	4.6	3.6	9.0	10.5	6.5	1.8	3.39	1.01	0.9	1.9	-0.05	-1.0	-0.3	0.1	0.3	1.8
APG	20MAR91:17:58	87.00	91.17	1.82	1	1.0	-1.4	-0.7	1.1	2.0	2.7	4.3	3.4	1.1	3.04	0.02	-1.2	1.1	0.02	-0.4	-0.2	0.0	0.2	0.4
APG	20MAR91:18:01	89.50	91.17	2.18	1	2.1	-1.1	-0.2	1.8	3.8	4.5	5.6	4.7	1.7	3.16	0.05	-1.6	1.6	0.06	-0.5	-0.0	0.0	0.2	0.5
APG	16JUL91:01:00	37.00	91.17	-	0	15.7	14.1	14.6	15.6	15.7	17.0	18.1	2.4	0.8	2.62	0.33	-1.0	0.8	-0.05	-0.2	-0.1	0.0	0.1	0.2
APG	16JUL91:05:02	39.50	91.17	-	0	15.3	13.4	14.1	15.2	14.6	16.7	17.8	2.6	0.8	2.73	0.21	-0.8	0.9	-0.06	-0.3	-0.1	0.0	0.1	0.3
APG	16JUL91:05:05	42.00	91.17	-	0	16.1	14.3	15.0	16.1	16.1	17.5	18.1	2.5	0.7	2.64	0.29	-0.4	0.7	-0.02	-0.2	-0.1	0.0	0.1	0.2

WAVEBAND : MID-IR(MOF)																								
SITE	TIME	ALTIMETER (degrees)	ELEVATION (degrees)	BDR (degrees)	SEA (deg.)	MINIMUM (deg.)	RANGE (deg.)	MEDIAN (deg.)	MODE (deg.)	RANGE (deg.)	MAXIMUM (deg.)	RANGE (deg.)	ENTROPY (DIMS/OUTS)	SKELNESS (DIMS/OUTS)	KURTOSIS (DIMS/OUTS)	CURTIN (DEG.C)	REYNOLDS (DIMS/OUTS)	CNT-05 (DEG.C)	CNT-25 (DEG.C)	CNT-50 (DEG.C)	CNT-75 (DEG.C)	CNT-95 (DEG.C)		
APC	16JUL91:05:10	47.00	91.17	-	0 15.8	13.6	14.6	15.9	15.8	17.2	17.8	2.9	0.8	2.79	-0.17	-0.3	0.8	0.04	-0.3	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:13	49.50	91.17	-	0 16.4	14.0	14.9	16.5	16.5	17.8	18.4	3.0	0.8	2.76	-0.23	0.2	0.5	0.32	-0.2	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:15	52.00	91.17	-	0 16.4	14.1	15.0	16.6	16.7	17.6	18.3	2.5	0.7	2.60	-0.38	0.2	0.6	0.19	-0.2	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:18	54.50	91.17	-	0 16.8	14.3	14.7	16.2	16.5	16.9	18.1	2.2	0.7	2.50	-0.54	-0.3	0.6	0.07	-0.3	-0.1	-0.0	0.1	0.3	
APC	16JUL91:05:20	57.00	91.17	-	0 15.9	14.2	14.8	16.2	16.5	16.8	17.7	2.8	0.6	2.47	-0.39	-0.8	0.6	0.06	-0.2	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:23	59.50	91.17	-	0 16.3	14.5	15.1	16.4	16.6	17.4	18.3	2.2	0.7	2.61	-0.04	-0.2	0.6	0.09	-0.1	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:26	62.00	91.17	-	0 16.3	14.5	15.1	16.3	17.0	17.4	18.3	2.4	0.8	2.70	-0.05	-0.8	0.7	0.06	-0.1	-0.1	-0.0	0.1	0.1	
APC	16JUL91:05:28	64.00	91.17	-	0 15.5	13.8	15.3	16.5	16.2	16.7	17.7	2.5	0.8	2.73	-0.05	-1.0	0.3	0.02	-0.2	-0.1	0.0	0.1	0.1	
APC	16JUL91:05:31	67.00	91.17	-	0 15.5	13.7	15.3	16.5	16.4	16.8	17.8	2.6	0.8	2.78	0.07	-0.8	0.9	-0.04	-0.3	-0.1	0.0	0.1	0.3	
APC	16JUL91:05:34	69.50	91.17	-	0 16.4	14.8	15.2	16.3	17.2	17.7	18.3	2.4	0.8	2.67	0.18	-1.3	0.9	-0.04	-0.2	-0.1	-0.0	0.1	0.1	
APC	16JUL91:05:39	74.50	91.17	-	0 15.7	14.3	14.8	15.7	16.5	16.9	18.1	2.3	0.8	2.55	0.08	-1.4	0.9	-0.05	-0.2	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:44	79.50	91.17	-	0 15.8	14.3	14.8	15.7	16.5	16.8	17.6	2.0	0.7	2.50	0.17	-1.1	0.7	-0.06	-0.3	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:47	82.00	91.17	-	0 16.5	14.6	15.3	16.4	17.1	17.5	18.2	2.2	0.7	2.54	-0.18	-0.8	0.6	0.06	-0.2	-0.1	-0.0	0.1	0.3	
APC	16JUL91:05:49	84.50	91.17	-	0 18.4	16.5	17.1	18.5	19.1	20.2	20.9	3.2	1.8	2.78	-0.19	-0.8	0.7	0.21	-0.6	-0.1	0.0	0.1	0.8	
APC	16JUL91:05:52	87.00	91.17	-	0 19.8	16.8	17.3	19.3	19.9	20.2	21.3	2.9	1.0	2.78	-0.34	-1.2	0.9	0.06	-0.2	-0.1	0.0	0.1	0.2	
APC	16JUL91:05:55	89.50	91.17	-	0 16.3	13.8	14.2	16.7	17.5	17.8	18.4	3.6	1.3	2.81	-0.33	-1.5	1.3	0.03	-0.2	-0.1	0.0	0.1	0.2	
APC	16JUL91:16:46	37.00	91.17	62.88	2 30.6	27.2	28.1	31.2	31.4	32.3	33.8	4.2	1.4	2.98	-0.73	-0.7	1.4	0.03	-0.4	0.0	0.1	0.2	0.6	
APC	16JUL91:16:48	37.50	91.17	62.37	2 29.8	26.3	27.3	30.3	30.4	32.2	38.0	4.9	1.6	3.26	0.00	0.2	1.5	0.11	-0.6	-0.1	0.1	0.4	0.9	
APC	16JUL91:16:50	42.20	91.17	61.86	2 28.6	25.1	26.1	29.0	29.0	30.9	40.0	4.9	1.5	3.15	0.17	2.8	1.5	-0.02	-0.4	-0.1	0.1	0.2	0.7	
APC	16JUL91:16:52	44.50	91.17	61.51	2 30.3	27.1	27.8	30.7	30.7	32.3	35.0	4.5	1.4	3.12	0.35	0.1	1.4	-0.05	-0.5	-0.1	0.1	0.2	0.9	
APC	16JUL91:16:54	47.00	91.17	61.06	2 28.2	26.7	25.3	28.0	27.4	31.5	42.3	6.2	2.1	3.47	2.18	8.7	2.7	-0.25	-1.1	-0.4	0.1	0.5	1.6	
APC	16JUL91:16:56	49.50	91.17	60.64	2 29.7	25.6	26.8	29.5	28.5	33.1	43.4	6.3	2.2	3.44	2.28	9.3	2.1	0.04	-1.5	-0.5	0.0	0.4	2.4	
APC	16JUL91:16:58	53.00	91.17	60.22	2 29.6	24.5	28.3	29.6	29.3	31.5	41.3	3.2	1.2	3.08	1.32	14.4	1.4	-0.07	-0.5	-0.2	0.0	0.2	0.9	
APC	16JUL91:16:59	54.50	91.17	59.85	2 30.5	25.3	28.5	30.6	30.5	32.4	38.3	3.9	1.2	2.98	-1.12	4.9	1.2	0.05	-0.6	-0.2	0.0	0.4	1.1	
APC	16JUL91:15:01	57.00	91.17	59.67	2 29.3	24.0	26.8	29.3	28.7	31.7	35.6	4.9	1.5	3.25	-0.42	2.0	1.4	0.12	-0.9	-0.2	0.0	0.5	1.4	
APC	16JUL91:15:03	59.50	91.17	59.35	2 29.4	23.3	26.4	29.4	28.0	32.1	44.6	5.5	2.0	3.43	0.77	6.4	1.7	0.09	-0.7	-0.2	0.0	0.4	1.2	
APC	16JUL91:15:05	62.00	91.17	59.07	2 29.0	23.9	26.4	29.4	30.2	31.1	33.0	4.7	1.5	3.23	-0.73	0.8	1.5	0.02	-0.4	0.0	0.1	0.2	0.6	
APC	16JUL91:15:10	69.50	91.17	58.45	2 29.5	23.7	26.0	30.1	30.5	31.9	34.6	5.8	1.7	3.27	-0.93	0.7	1.7	0.02	-1.0	-0.2	0.1	0.4	0.9	
APC	16JUL91:15:14	74.50	91.17	58.44	2 32.2	25.9	28.9	32.8	33.2	34.7	48.1	5.7	2.5	3.46	1.70	10.9	1.9	0.23	-1.2	-0.2	0.0	0.4	1.0	
APC	16JUL91:15:16	76.50	91.17	58.40	2 30.5	24.2	26.8	31.0	28.9	33.4	46.5	6.6	2.2	3.46	0.91	7.4	2.6	-0.16	-1.6	-0.4	0.1	0.5	1.1	
APC	16JUL91:15:17	77.00	91.17	58.41	2 31.0	24.7	28.2	31.7	31.5	34.2	42.2	6.0	2.0	3.22	-0.28	1.6	2.0	0.00	-1.0	-0.2	0.2	0.5	1.2	
APC	16JUL91:15:19	82.00	91.17	58.46	2 29.0	21.6	24.5	27.3	27.3	32.7	61.1	28.1	7.5	3.64	2.63	5.8	2.2	0.69	-5.2	-0.7	0.0	0.5	5.0	
APC	16JUL91:15:21	84.50	91.17	58.78	2 32.9	23.2	25.6	30.4	28.1	34.0	59.0	28.4	8.2	4.06	1.86	2.1	9.2	-0.16	-4.7	-1.2	0.2	2.2	7.7	
APC	16JUL91:15:23	87.00	91.17	58.93	2 28.7	21.1	22.8	27.4	27.6	28.7	34.1	6.0	1.7	3.22	-1.12	2.4	1.7	-0.05	-0.4	-0.1	0.1	0.2	0.6	
APC	16JUL91:15:25	89.50	91.17	59.12	2 30.6	23.9	27.3	29.7	30.2	43.7	48.2	16.4	4.4	3.71	2.56	6.3	4.2	0.04	-2.7	-0.6	0.0	0.4	5.3	
APC	16JUL91:16:46	39.50	91.17	56.02	2 31.2	28.1	28.6	31.7	31.7	33.6	37.0	5.0	1.6	3.09	-0.22	-0.4	1.5	0.10	-0.5	-0.1	0.1	0.4	0.9	

WAVEBAND = MID-IR(MOF)																								
SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BOA	MEAN (Deg. C)	MINIMUM (Deg. C)	PERCENT (Deg. C)	MEDIAN (Deg. C)	MODE (Deg. C)	PERCENT (Deg. C)	NAVIUM (Deg. C)	RNG. 90 (Deg. C)	ENTROPY (Deg. C)	SKINNESS (D. Minus on Less)	KLINOSIS (D. Minus on Less)	CLUSTER (Deg. C)	REYNOLDS (D. Minus on Less)	CNT.05 (Deg. C)	CNT.25 (Deg. C)	CNT.50 (Deg. C)	CNT.75 (Deg. C)	CNT.95 (Deg. C)		
APC	17 JUL 91:03:42	87.00	91.17	0	22.9	22.2	22.4	22.9	23.2	23.3	23.9	0.9	0.3	1.79	0.03	-1.0	0.3	-0.1	-0.0	0.0	0.0	0.1		
APC	17 JUL 91:03:45	89.50	91.17	0	22.7	21.6	22.1	22.7	22.5	23.5	24.1	1.4	0.5	2.17	0.11	-1.1	0.4	0.12	-0.2	-0.1	0.0	0.1		
APC	17 JUL 91:04:47	39.50	91.17	0	21.6	20.8	21.1	21.6	21.4	22.2	22.9	1.1	0.4	1.90	0.37	-0.8	0.4	0.00	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:04:49	42.00	91.17	0	21.7	21.0	21.3	21.7	21.4	22.2	23.2	0.9	0.3	1.77	0.31	-0.5	0.08	-0.1	-0.0	0.0	0.1	0.1		
APC	17 JUL 91:04:51	44.50	91.17	0	22.3	21.5	21.9	22.3	22.3	22.7	23.2	0.8	0.2	1.64	0.14	-0.2	0.2	0.06	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:04:53	47.00	91.17	0	22.7	21.7	22.3	22.8	22.8	23.2	23.8	0.9	0.3	1.67	-0.36	0.4	0.2	0.14	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:04:55	49.50	91.17	0	21.6	20.8	21.3	21.7	21.7	22.0	22.7	0.7	0.2	1.62	-0.33	0.7	0.2	0.18	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:04:57	52.00	91.17	0	21.6	20.7	21.1	21.6	21.6	22.0	22.9	0.9	0.3	1.73	-0.28	-0.1	0.2	0.09	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:02	57.00	91.17	0	21.7	20.8	21.2	21.7	21.7	22.0	22.3	0.8	0.2	1.54	-0.78	0.7	0.2	0.15	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:04	59.50	91.17	0	21.4	20.4	21.0	21.4	21.4	21.8	22.3	0.8	0.3	1.70	-0.40	-0.0	0.2	0.07	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:06	62.00	91.17	0	21.5	20.6	21.0	21.5	21.5	21.8	22.3	0.8	0.2	1.64	-0.47	-0.1	0.2	0.14	-0.0	-0.0	0.0	0.1		
APC	17 JUL 91:05:08	64.50	91.17	0	21.3	20.2	20.9	21.4	21.5	21.7	22.2	0.8	0.3	1.78	-0.53	0.4	0.2	0.16	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:10	67.00	91.17	0	21.4	20.4	20.8	21.4	21.4	21.8	22.3	1.0	0.3	1.89	-0.32	-0.7	0.3	0.07	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:12	69.50	91.17	0	21.3	20.1	20.8	21.3	21.4	21.7	22.1	0.8	0.3	1.73	-0.29	0.2	0.2	0.11	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:15	72.00	91.17	0	21.4	20.3	20.9	21.4	21.2	21.9	23.9	1.0	0.4	1.89	1.39	7.5	0.4	-0.10	-0.1	-0.1	0.0	0.2		
APC	17 JUL 91:05:17	74.50	91.17	0	21.7	20.5	21.3	21.7	21.7	22.1	22.6	0.8	0.3	1.70	-0.40	0.2	0.2	0.10	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:19	77.00	91.17	0	21.6	20.4	21.1	21.6	21.5	22.3	22.6	0.9	0.3	1.75	-0.54	0.7	0.3	0.10	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:21	79.50	91.17	0	21.8	20.9	21.4	21.8	21.6	22.2	22.6	0.9	0.3	1.71	-0.65	-0.5	0.2	0.09	-0.1	-0.0	0.0	0.1		
APC	17 JUL 91:05:23	82.00	91.17	0	21.8	20.3	21.2	21.8	22.0	22.4	23.2	1.2	0.4	2.06	-0.32	0.5	0.3	0.16	-0.2	-0.0	0.0	0.1		
APC	17 JUL 91:05:25	84.50	91.17	0	22.3	21.0	21.6	22.3	22.5	23.0	23.3	1.3	0.4	2.10	-0.13	-0.3	0.4	0.02	-0.2	-0.1	0.0	0.1		
APC	17 JUL 91:05:27	87.00	91.17	0	22.1	21.2	21.6	22.1	22.1	22.9	23.7	1.8	0.5	2.41	0.01	-0.2	0.5	0.08	-0.2	-0.0	0.0	0.1		
APC	17 JUL 91:05:30	89.50	91.17	0	20.9	19.4	20.8	20.9	21.4	21.8	22.4	1.8	0.6	2.38	0.01	-1.1	0.5	0.09	-0.2	-0.0	0.0	0.1		
APC	17 JUL 91:06:51	47.00	91.17	154.80	4	22.8	21.1	21.6	22.9	23.0	23.9	2.2	0.6	2.56	-0.20	-0.1	6.6	0.05	-0.4	-0.1	0.0	0.2		
APC	17 JUL 91:06:53	49.50	91.17	156.81	4	22.8	20.4	21.1	22.1	22.1	23.9	23.7	1.8	0.5	2.41	0.01	-0.2	0.5	0.06	-0.4	-0.1	0.0	0.2	
APC	17 JUL 91:06:55	52.00	91.17	158.52	4	21.9	20.2	20.9	21.9	21.8	23.3	2.4	0.8	2.60	1.34	3.2	6.5	0.37	-0.4	-0.2	-0.0	0.1		
APC	17 JUL 91:07:06	69.50	91.17	166.29	4	20.2	20.4	27.2	28.0	27.8	29.6	32.7	2.5	0.9	2.68	1.95	6.2	0.7	0.16	-0.5	-0.2	-0.0	0.2	
APC	17 JUL 91:07:13	79.50	91.17	164.18	4	29.9	27.0	28.3	29.8	29.0	32.8	38.0	4.5	1.5	3.24	1.26	2.7	1.5	-0.05	-1.2	-0.4	-0.1	0.4	
APC	17 JUL 91:07:15	82.00	91.17	162.88	4	33.4	27.6	29.5	32.7	31.2	39.3	45.9	9.8	3.1	3.97	0.93	0.9	2.3	0.26	-1.5	-0.6	0.0	0.7	
APC	17 JUL 91:07:16	84.50	91.17	161.42	4	33.0	26.5	26.9	32.4	27.7	40.9	45.3	14.0	4.8	4.31	0.33	-1.1	5.1	-0.08	-1.6	-0.3	0.4	1.6	
APM	20 JUL 91:04:52	297.83	90.75	48.50	2	23.8	23.2	23.4	23.8	23.9	24.2	0.8	0.3	1.71	1.62	6.7	0.3	0.06	-0.1	-0.0	0.0	0.1		
APM	20 JUL 91:04:59	297.83	90.75	41.41	1	25.7	21.4	22.5	26.4	27.9	28.6	31.2	6.2	2.2	3.50	-0.22	-1.4	2.2	-0.00	-0.5	-0.1	0.1	0.4	
APM	20 JUL 91:06:51	300.33	90.75	43.12	1	25.6	21.7	22.6	25.7	22.8	29.0	30.4	6.4	2.2	3.61	0.03	-1.3	2.1	0.06	-0.7	-0.1	0.1	0.3	
APM	20 JUL 91:08:54	302.83	90.75	44.86	1	31.0	26.3	27.5	31.1	27.6	35.2	36.5	7.7	2.7	3.77	0.11	-1.3	2.5	0.06	-0.6	-0.1	0.1	0.5	
APM	20 JUL 91:08:57	305.33	90.75	46.56	2	26.4	22.2	23.1	26.5	28.9	29.6	32.5	6.4	2.2	3.65	0.06	-1.0	2.2	0.00	-0.8	-0.2	0.1	0.4	
APM	20 JUL 91:09:00	307.83	90.75	48.28	2	27.8	23.2	24.6	27.7	27.2	31.2	34.1	6.6	2.2	3.67	0.09	-1.0	1.3	0.38	-1.0	-0.2	0.1	0.4	
APM	20 JUL 91:09:03	310.33	90.75	50.02	2	26.9	22.6	23.4	27.4	23.4	30.1	33.5	6.6	2.2	3.59	-0.27	-0.7	1.8	0.18	-0.6	-0.2	0.1	0.4	
APM	20 JUL 91:09:06	312.83	90.75	51.75	2	30.8	26.5	27.4	31.2	27.5	34.0	38.1	6.5	2.1	3.60	-0.16	-0.7	1.7	0.19	-0.7	-0.2	0.1	0.3	

UNIVERSITY MICROFILMS : K10-IR(MOF)

		UNIVERSITY : MID-18(MID)															
TIME	TIME	AZIMUTH (Deg)	ELEVATION (Deg)	BIDN (Deg)	RA (Deg)	MIN (Deg)	SEC (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)	UT (Deg)
APR 20 16:49	300.33	90.75	126.23	3	37.5	35.6	36.0	37.5	36.1	39.8	42.7	3.8	1.3	2.95	1.10	1.9	1.3
APR 20 16:51	302.83	90.75	125.27	3	39.7	37.1	37.5	39.3	37.5	44.8	45.8	7.3	2.2	3.39	1.05	0.3	1.6
APR 20 16:53	305.33	90.75	124.24	3	38.7	36.4	36.9	38.9	36.9	40.7	45.4	3.8	1.4	3.07	1.07	3.3	1.2
APR 20 16:55	307.83	90.75	123.14	3	39.0	36.7	37.2	39.1	39.5	41.1	43.3	3.9	1.3	3.06	0.84	0.9	0.9
APR 20 16:57	310.33	90.75	121.98	3	39.1	36.9	37.4	39.5	39.7	41.0	43.3	3.6	1.2	2.97	0.81	-0.3	0.9
APR 20 16:59	312.83	90.75	121.00	3	37.5	35.6	36.0	37.6	37.7	39.1	42.3	3.1	1.0	2.77	0.64	0.8	0.8
APR 20 17:01	315.33	90.75	119.73	3	37.7	35.8	36.3	37.8	37.8	39.0	42.7	2.7	0.9	2.82	1.28	4.8	0.8
APR 20 17:03	317.83	90.75	118.43	3	39.1	37.0	37.8	39.1	39.8	40.1	45.5	2.4	1.0	2.66	2.42	11.3	0.9
APR 20 17:05	322.83	90.75	115.67	3	38.6	36.4	37.2	38.5	38.2	40.8	44.7	3.6	1.3	3.03	1.73	4.4	1.0
APR 20 17:07	327.83	90.75	115.08	3	2.8	2.5	2.6	2.8	2.8	3.1	3.4	0.5	0.1	1.15	0.49	0.2	-
APR 20 17:09	332.83	90.75	114.08	3	1.1	0.8	0.9	1.1	1.0	1.4	1.7	0.5	0.1	1.12	0.76	0.5	-
APR 20 17:11	337.83	90.75	113.46	3	1.1	0.7	0.9	1.1	1.0	1.4	1.9	0.5	0.1	1.13	0.67	0.5	-
APR 20 17:13	342.83	90.75	113.43	3	1.3	0.8	1.1	1.3	1.2	1.6	2.0	0.5	0.1	1.14	0.57	0.6	-
APR 20 17:15	347.83	90.75	112.28	3	1.2	0.8	1.0	1.2	1.1	1.5	2.1	0.5	0.1	1.15	0.82	0.7	-
APR 20 17:17	352.83	90.75	111.08	3	1.1	0.8	0.9	1.1	1.0	1.4	1.8	0.5	0.1	1.13	0.81	0.7	-
APR 20 17:19	357.83	90.75	110.73	3	1.2	0.8	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:21	362.83	90.75	110.01	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:23	367.83	90.75	109.72	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:25	372.83	90.75	109.01	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:27	377.83	90.75	108.74	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:29	382.83	90.75	108.42	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:31	387.83	90.75	108.15	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:33	392.83	90.75	107.87	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:35	397.83	90.75	107.59	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:37	402.83	90.75	107.31	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:39	407.83	90.75	107.03	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:41	412.83	90.75	106.75	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:43	417.83	90.75	106.47	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:45	422.83	90.75	106.19	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:47	427.83	90.75	105.91	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:49	432.83	90.75	105.63	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:51	437.83	90.75	105.35	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:53	442.83	90.75	105.07	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:55	447.83	90.75	104.79	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:57	452.83	90.75	104.51	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 17:59	457.83	90.75	104.23	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:01	462.83	90.75	103.95	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:03	467.83	90.75	103.67	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:05	472.83	90.75	103.39	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:07	477.83	90.75	103.11	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:09	482.83	90.75	102.83	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:11	487.83	90.75	102.55	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:13	492.83	90.75	102.27	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:15	497.83	90.75	101.99	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:17	502.83	90.75	101.71	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:19	507.83	90.75	101.43	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:21	512.83	90.75	101.15	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:23	517.83	90.75	100.87	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:25	522.83	90.75	100.59	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:27	527.83	90.75	100.31	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:29	532.83	90.75	100.03	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:31	537.83	90.75	99.75	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:33	542.83	90.75	99.47	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:35	547.83	90.75	99.19	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:37	552.83	90.75	98.91	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:39	557.83	90.75	98.63	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:41	562.83	90.75	98.35	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:43	567.83	90.75	98.07	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:45	572.83	90.75	97.79	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:47	577.83	90.75	97.51	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:49	582.83	90.75	97.23	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:51	587.83	90.75	96.95	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:53	592.83	90.75	96.67	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:55	597.83	90.75	96.39	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:57	602.83	90.75	96.11	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 18:59	607.83	90.75	95.83	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:01	612.83	90.75	95.55	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:03	617.83	90.75	95.27	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:05	622.83	90.75	94.99	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:07	627.83	90.75	94.71	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:09	632.83	90.75	94.43	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:11	637.83	90.75	94.15	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1	-
APR 20 19:13	642.83	90.75	93.87	3	1.4	0.9	1.1	1.4	1.3	1.8	2.1	0.7	0.2	1.42	0.53	-0.1</	

UNVEILED : MID-IR(MOF)

TIME	SLT	ELEVATION (Degrees)	BOA (Degrees)	MEAN (Degrees)	MIN (Degrees)	PENC (Degrees)	MEDIAN (Degrees)	MODE (Degrees)	PENC (Degrees)	MAX (Degrees)	ANG (Degrees)	BO (Degrees)	ENTRANCE (Degrees)	SKELNESS (Degrees)	FLUENTS (Degrees)	CLUTTER (Degrees)	RETURNS (Degrees)	CNT05 (Degrees)	CNT25 (Degrees)	CNT50 (Degrees)	CNT75 (Degrees)	CNT95 (Degrees)	
FTD 2004091:09:45	FTD	90.75	71.51	2	4.5	2.9	3.3	4.8	4.9	5.4	5.9	2.1	0.7	2.43	-0.51	-1.1	-	-0.2	-0.0	0.0	0.2	0.4	0.6
FTD 2004091:09:48	FTD	90.75	73.09	2	4.3	2.6	3.0	4.6	4.7	5.1	5.4	2.1	0.7	2.30	-1.00	-0.2	-	-0.2	-0.1	0.1	0.3	0.4	0.6
FTD 2004091:09:50	FTD	90.75	74.48	2	4.4	2.5	3.1	4.6	4.8	5.1	5.5	2.0	0.6	2.28	-1.13	0.6	-	-0.2	-0.0	0.1	0.2	0.5	0.7
FTD 2004091:09:53	FTD	90.75	76.04	2	2.7	1.1	1.6	2.8	2.7	3.6	4.1	2.0	0.6	2.37	-0.44	0.4	-	-0.1	0.0	0.1	0.2	0.3	0.5
FTD 2004091:09:55	FTD	90.75	77.40	2	4.2	2.6	3.1	4.3	4.5	5.0	5.6	1.9	0.6	2.39	-0.51	-0.3	-	-0.1	0.0	0.1	0.2	0.3	0.5
FTD 2004091:09:58	FTD	90.75	78.94	2	3.9	2.2	2.9	4.0	4.0	4.8	5.6	1.9	0.6	2.44	-0.29	-0.1	-	-0.2	-0.1	0.0	0.2	0.4	0.6
FTD 2004091:10:00	FTD	90.75	80.27	2	4.3	2.9	3.6	4.4	4.4	5.1	5.8	1.5	0.5	2.22	-0.08	-0.2	-	-0.1	0.0	0.0	0.1	0.3	0.5
FTD 2004091:10:03	FTD	90.75	81.78	2	8.6	7.4	8.0	8.6	8.4	9.4	9.9	1.3	0.4	2.14	0.05	-0.7	-	-0.2	-0.1	0.0	0.1	0.2	0.4
FTD 2004091:10:05	FTD	90.75	83.08	2	9.5	8.4	9.0	9.6	9.7	10.3	11.3	1.6	0.5	2.23	0.08	-0.2	-	-0.1	0.0	0.0	0.2	0.3	0.5
FTD 2004091:10:08	FTD	90.75	84.38	2	9.5	8.4	9.0	9.6	9.7	10.3	11.3	1.6	0.5	2.23	0.08	-0.2	-	-0.1	0.0	0.0	0.2	0.3	0.5
FTD 2004091:10:10	FTD	90.75	85.84	2	6.6	5.5	6.0	6.6	6.5	5.7	6.3	1.7	0.5	2.25	0.65	0.2	-	-0.2	-0.1	0.0	0.1	0.3	0.5
FTD 2004091:10:13	FTD	90.75	87.31	2	9.7	8.6	9.0	9.7	9.4	10.5	11.2	1.5	0.5	2.21	0.28	-0.5	0.4	-0.1	-0.0	0.0	0.1	0.2	0.4
FTD 2004091:10:16	FTD	90.75	88.54	2	3.9	2.9	3.3	3.9	3.9	4.6	5.4	1.4	0.4	2.16	0.15	-0.7	0.4	-0.1	-0.0	0.0	0.1	0.2	0.4
FTD 2004091:10:19	FTD	90.75	89.54	2	2.0	1.2	1.5	2.0	2.1	2.6	3.0	1.1	0.3	1.08	0.22	-0.2	-	-0.1	0.0	0.0	0.1	0.1	0.3
FTD 2004091:11:42	FTD	90.75	52.33	2	2.0	1.2	1.5	2.0	2.1	2.6	3.0	1.1	0.3	1.08	0.22	-0.2	-	-0.1	0.0	0.0	0.1	0.1	0.3
FTD 2004091:11:44	FTD	90.75	52.96	2	3.1	2.2	2.5	3.2	3.3	3.8	4.3	1.3	0.4	2.05	-0.33	-0.6	-	-0.1	-0.0	0.0	0.1	0.1	0.3
FTD 2004091:11:47	FTD	90.75	53.75	2	2.7	1.6	1.9	2.8	2.8	3.3	3.7	1.3	0.4	2.04	-0.38	-0.4	-	-0.1	-0.0	0.0	0.1	0.2	0.4
FTD 2004091:11:49	FTD	90.75	54.41	2	2.8	1.6	2.0	3.0	3.0	3.4	4.0	1.4	0.5	2.07	-0.62	-0.5	-	-0.1	0.0	0.0	0.1	0.2	0.4
FTD 2004091:11:52	FTD	90.75	55.91	2	3.8	1.3	1.6	3.2	3.2	4.0	4.4	2.3	0.7	2.53	-0.59	-0.6	-	-0.1	0.0	0.1	0.2	0.3	0.5
FTD 2004091:11:54	FTD	90.75	55.91	2	3.7	1.8	2.2	4.0	4.0	4.7	5.1	2.4	0.8	2.53	-0.82	-0.3	-	-0.2	-0.1	0.0	0.3	0.5	0.7
FTD 2004091:11:57	FTD	90.75	56.77	2	2.8	1.1	1.9	2.9	2.9	3.5	3.8	1.6	0.4	2.10	-1.07	1.6	-	-0.1	0.0	0.1	0.2	0.3	0.5
FTD 2004091:11:59	FTD	90.75	57.47	2	4.3	3.2	4.0	4.3	4.3	4.8	5.6	0.8	0.3	1.66	0.65	2.7	-	-0.0	0.0	0.1	0.1	0.3	0.5
FTD 2004091:12:02	FTD	90.75	58.37	2	2.3	1.6	1.9	2.3	2.3	2.9	3.4	1.0	0.3	1.73	0.69	0.9	-	-0.1	-0.0	0.0	0.0	0.1	0.3
FTD 2004091:12:04	FTD	90.75	59.10	2	2.3	1.7	2.0	2.3	2.2	2.8	3.3	0.9	0.3	1.63	0.70	0.3	-	-0.0	0.0	0.0	0.1	0.1	0.3
FTD 2004091:12:07	FTD	90.75	60.02	2	2.6	2.1	2.4	2.7	2.6	3.1	3.7	0.7	0.2	1.50	0.59	0.6	-	-0.0	0.0	0.0	0.1	0.1	0.3
FTD 2004091:12:12	FTD	90.75	61.73	2	2.9	2.2	2.6	2.9	2.7	3.5	4.1	0.9	0.3	1.78	0.49	-0.5	0.3	-0.1	-0.1	0.0	0.1	0.2	0.4
FTD 2004091:12:15	FTD	90.75	62.49	2	3.1	2.3	2.6	3.1	3.2	3.7	4.2	1.1	0.3	1.91	0.17	-0.6	0.3	-0.1	-0.1	0.0	0.1	0.2	0.4
FTD 2004091:13:43	FTD	90.75	64.35	1	9.1	7.1	7.6	9.4	9.2	10.2	10.4	2.6	0.9	2.56	-0.57	-1.1	-	-0.2	0.0	0.1	0.2	0.4	0.6
FTD 2004091:13:44	FTD	90.75	63.64	1	9.0	6.8	7.5	9.1	9.6	10.0	10.3	2.5	0.8	2.52	-0.74	-0.8	-	-0.1	0.0	0.1	0.3	0.5	0.7
FTD 2004091:13:49	FTD	90.75	62.97	1	8.8	6.9	7.7	8.8	8.8	9.8	10.3	2.1	0.6	2.46	-0.19	-0.2	-	-0.4	-0.2	-0.0	0.4	0.7	0.9
FTD 2004091:13:52	FTD	90.75	62.35	1	8.9	7.6	8.0	8.9	8.6	10.0	10.6	2.0	0.6	2.49	0.15	-0.8	-	-0.4	-0.2	0.0	0.4	0.8	1.0
FTD 2004091:13:55	FTD	90.75	61.73	1	9.1	7.1	8.2	9.2	9.2	9.9	10.3	1.7	0.5	2.33	-0.73	0.7	-	-0.4	-0.2	0.1	0.5	0.7	0.9
FTD 2004091:13:57	FTD	90.75	61.16	1	12.5	9.6	10.6	12.9	13.3	13.7	14.8	3.1	1.0	2.86	-0.79	-0.2	-	-0.2	-0.1	0.3	0.5	0.6	0.8
FTD 2004091:14:00	FTD	90.75	40.61	1	9.2	6.6	7.4	9.4	9.4	10.2	10.7	2.8	0.7	2.80	-1.39	2.6	-	-0.3	0.0	0.2	0.4	0.6	0.8
FTD 2004091:14:03	FTD	90.75	40.20	1	12.5	10.2	11.5	12.7	13.0	13.5	14.5	2.0	0.7	2.54	-0.19	-0.5	-	-0.3	0.0	0.2	0.4	0.7	0.9
FTD 2004091:14:06	FTD	90.75	39.75	1	10.8	9.8	10.2	10.7	10.5	12.2	13.6	2.0	0.6	2.37	1.24	1.6	-	-0.5	-0.2	-0.1	0.0	0.3	0.5
FTD 2004091:14:08	FTD	90.75	39.35	1	11.6	9.6	9.9	11.9	12.0	12.8	13.3	2.9	0.9	2.59	-0.76	-0.5	-	-0.5	-0.1	0.1	0.3	0.7	0.9
FTD 2004091:14:50	FTD	90.75	48.45	2	9.9	8.1	8.8	10.1	10.1	10.7	11.3	2.0	0.6	2.40	-0.65	-0.3	-	-0.0	0.0	0.1	0.1	0.2	0.4

UNIVERSITY - MID-LEVELS																					
TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BOA (Degrees)	MEAN (Deg, C)	MINIMUM (Deg, C)	MAXIMUM (Deg, C)	MEDIAN (Deg, C)	MODE (Deg, C)	PERC_95 (Deg, C)	PERC_90 (Deg, C)	SD (Deg, C)	RATIOSIS (Dimensionless)	SKWNESS (Dimensionless)	KURTOSIS (Dimensionless)	CLUSTER (Deg, C)	REYNOLDS (Dimensions)	CUT_05 (Deg, C)	CUT_25 (Deg, C)	CUT_50 (Deg, C)	CUT_75 (Deg, C)	CUT_95 (Deg, C)
FTD 20000971:15:53	25.00	90.75	44.70	2	9.6	8.0	8.4	9.8	9.8	10.5	11.2	2.0	0.6	2.52	-0.69	-0.1	-0.1	0.0	0.0	0.2	0.3
FTD 20000971:15:56	27.50	90.75	44.85	1	9.8	8.1	8.5	9.9	9.9	10.7	11.0	1.7	0.5	2.30	-0.69	0.3	-0.3	0.0	0.1	0.2	0.3
FTD 20000971:15:59	30.00	90.75	43.09	1	9.7	8.6	8.7	9.8	9.8	10.4	11.2	1.7	0.5	2.30	-0.57	0.2	-0.2	0.0	0.1	0.2	0.2
FTD 20000971:16:01	32.50	90.75	41.34	1	9.4	7.7	8.5	9.4	9.4	10.0	10.6	1.5	0.5	2.17	-0.78	0.9	-0.1	0.0	0.1	0.2	0.3
FTD 20000971:16:04	35.00	90.75	39.49	1	9.8	8.9	9.3	9.8	9.8	10.4	10.9	1.1	0.3	1.95	0.21	0.1	-0.1	0.0	0.1	0.1	0.2
FTD 20000971:16:06	37.50	90.75	37.76	1	9.7	8.9	9.3	9.7	9.6	10.3	10.9	1.0	0.3	1.77	0.51	0.4	-0.1	-0.0	0.0	0.1	0.2
FTD 20000971:16:09	40.00	90.75	35.90	1	9.6	8.7	9.1	9.6	9.5	10.1	10.6	1.0	0.3	1.77	0.50	0.1	-0.1	-0.0	0.0	0.1	0.2
FTD 20000971:16:12	42.50	90.75	34.17	1	9.3	8.5	8.9	9.3	9.2	9.9	10.6	1.0	0.3	1.96	0.58	0.4	-0.1	0.0	0.0	0.1	0.2
FTD 20000971:16:14	45.00	90.75	32.44	1	9.8	8.1	8.5	9.9	8.8	9.7	10.5	1.2	0.4	1.90	0.77	0.5	-0.1	0.0	0.0	0.1	0.3
FTD 20000971:16:17	47.50	90.75	30.68	1	9.2	8.1	8.6	9.2	8.9	10.0	10.7	1.5	0.5	2.22	0.35	-0.5	0.4	0.12	-0.1	0.0	0.1
FTD 20000971:16:19	50.00	90.75	28.97	1	10.2	9.1	9.6	10.2	10.3	11.0	11.9	1.5	0.5	2.21	0.27	-0.2	0.3	0.23	-0.1	0.0	0.1
FTD 20000971:17:42	17.50	90.75	69.20	2	7.7	7.3	7.4	7.7	7.6	8.2	8.4	0.8	0.3	1.59	0.42	-1.0	-0.2	-0.1	0.0	0.1	0.2
FTD 20000971:17:44	20.00	90.75	67.22	2	7.6	7.1	7.3	7.6	7.6	8.1	8.3	0.8	0.3	1.55	0.45	-0.9	-0.2	-0.1	0.0	0.1	0.1
FTD 20000971:17:47	22.50	90.75	65.07	2	7.6	7.1	7.3	7.6	7.5	8.0	8.3	0.6	0.2	1.38	0.59	-0.3	-0.1	-0.1	0.0	0.0	0.1
FTD 20000971:17:49	25.00	90.75	63.99	2	7.6	7.2	7.4	7.6	7.5	8.0	8.3	0.7	0.2	1.65	0.50	-1.0	-0.1	-0.1	-0.0	0.0	0.1
FTD 20000971:17:52	27.50	90.75	60.94	2	7.6	7.2	7.4	7.6	7.5	8.0	8.2	0.6	0.2	1.29	0.65	-0.1	-0.1	-0.1	-0.0	0.0	0.1
FTD 20000971:17:54	30.00	90.75	58.95	2	7.9	7.5	7.6	7.9	7.8	8.3	8.6	0.6	0.2	1.44	0.38	-0.5	-0.1	-0.1	-0.0	0.0	0.1
FTD 20000971:17:57	32.50	90.75	56.80	2	7.9	7.5	7.7	7.9	7.8	8.3	8.6	0.6	0.2	1.36	0.35	-0.1	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:17:59	35.00	90.75	54.81	2	7.6	7.0	7.3	7.6	7.6	7.9	8.2	0.6	0.2	1.51	0.01	-0.6	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:18:02	37.50	90.75	52.66	2	7.9	7.6	7.7	7.9	7.8	8.2	8.5	0.5	0.2	1.19	0.56	0.1	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:18:04	40.00	90.75	50.67	2	7.9	7.5	7.7	7.9	7.8	8.1	8.5	0.4	0.1	1.15	0.41	0.1	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:18:07	42.50	90.75	48.52	2	7.6	7.1	7.3	7.6	7.5	7.8	8.2	0.5	0.2	1.22	0.12	0.0	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:18:09	45.00	90.75	46.53	2	7.8	7.4	7.6	7.9	7.8	8.1	8.5	0.5	0.2	1.27	0.30	-0.2	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:18:12	47.50	90.75	44.39	1	7.5	7.0	7.2	7.5	7.4	7.8	8.1	0.6	0.2	1.33	0.00	-0.2	0.1	0.25	-0.1	-0.0	0.0
FTD 20000971:18:15	50.00	90.75	42.41	1	8.2	7.7	8.0	8.2	8.2	8.5	8.8	0.5	0.2	1.20	0.25	-0.1	0.1	0.10	-0.0	0.0	0.0
FTD 20000971:19:45	17.50	90.75	-	8	2.9	2.3	2.5	2.8	2.6	3.5	3.9	0.9	0.3	1.71	0.84	0.1	-0.2	-0.1	0.0	0.0	0.1
FTD 20000971:19:48	20.00	90.75	-	8	6.6	6.1	6.3	6.6	6.4	7.1	7.6	0.8	0.3	1.56	0.78	0.2	-0.1	-0.1	0.0	0.0	0.1
FTD 20000971:19:52	22.50	90.75	-	8	8.5	8.7	8.9	8.8	9.3	9.8	10.3	0.6	0.2	1.37	0.97	0.5	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:19:55	25.00	90.75	-	0	10.3	9.8	10.0	10.3	10.2	10.7	11.0	0.7	0.2	1.61	0.69	0.0	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:19:59	27.50	90.75	-	0	9.8	9.3	9.6	9.8	9.7	10.2	10.7	0.6	0.2	1.30	0.90	1.3	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:03	30.00	90.75	-	0	10.2	9.7	9.9	10.2	10.0	10.5	11.0	0.6	0.2	1.41	0.74	0.5	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:06	32.50	90.75	-	0	6.7	6.2	6.5	6.7	6.6	7.1	7.6	0.7	0.2	1.39	0.90	0.7	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:10	35.00	90.75	-	0	7.2	6.6	6.9	7.2	7.2	7.6	7.8	0.7	0.2	1.47	0.07	-0.7	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:13	37.50	90.75	-	0	10.5	10.0	10.2	10.5	10.5	10.9	11.3	0.7	0.2	1.48	0.39	0.4	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:17	40.00	90.75	-	0	10.4	10.0	10.2	10.5	10.4	10.8	11.2	0.6	0.2	1.32	0.72	0.4	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:21	42.50	90.75	-	0	14.3	13.6	14.0	14.4	14.3	14.8	15.4	0.7	0.2	1.49	0.65	1.1	-0.1	-0.0	0.0	0.0	0.1
FTD 20000971:20:24	45.00	90.75	-	0	11.3	11.0	11.1	11.3	11.3	11.6	12.1	0.5	0.2	1.21	0.87	1.2	-0.1	-0.0	0.0	0.0	0.1

		LAYERNAME : MID-TECH															
DATE	TIME	ALTIM (Degrees)	ELEVATION (Degrees)	SLID (Degrees)	RA (Degrees)	RAZ (Degrees)	PERC (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)	RAZ (Degrees)
FTD	26MAR91:20:28	47.50	90.75	-	0	11.2	10.7	11.0	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
FTD	26MAR91:20:31	50.00	90.75	-	0	11.8	11.6	11.6	11.8	11.7	12.1	12.4	12.4	12.4	12.4	12.4	12.4
FTD	26MAR91:21:49	17.50	90.75	-	0	0.7	0.4	0.5	0.7	0.5	0.9	1.2	1.2	1.2	1.2	1.2	1.2
FTD	26MAR91:21:52	20.00	90.75	-	0	5.2	4.9	5.1	5.2	5.2	5.5	5.8	5.8	5.8	5.8	5.8	5.8
FTD	26MAR91:21:55	22.50	90.75	-	0	8.6	8.6	8.5	8.6	8.5	8.8	1.1	1.3	1.3	1.3	1.3	1.3
FTD	26MAR91:21:57	25.00	90.75	-	0	4.7	4.4	4.5	4.7	4.6	4.9	5.2	5.4	5.4	5.4	5.4	5.4
FTD	26MAR91:21:58	27.50	90.75	-	0	4.6	4.4	4.5	4.6	4.6	4.8	5.1	5.3	5.3	5.3	5.3	5.3
FTD	26MAR91:22:00	30.00	90.75	-	0	5.8	4.8	4.9	5.0	4.9	5.2	5.6	5.8	5.8	5.8	5.8	5.8
FTD	26MAR91:22:02	32.50	90.75	-	0	4.8	4.4	4.6	4.8	4.7	5.0	5.4	5.5	5.5	5.5	5.5	5.5
FTD	26MAR91:22:05	35.00	90.75	-	0	4.9	4.7	4.8	4.9	5.0	5.1	5.3	5.3	5.3	5.3	5.3	5.3
FTD	26MAR91:22:07	37.50	90.75	-	0	5.8	4.8	4.9	5.0	5.0	5.3	5.4	5.4	5.4	5.4	5.4	5.4
FTD	26MAR91:22:10	40.00	90.75	-	0	6.1	3.9	4.0	4.1	4.0	4.3	4.5	4.5	4.5	4.5	4.5	4.5
FTD	26MAR91:22:12	42.50	90.75	-	0	6.4	6.2	6.3	6.4	6.4	6.6	6.8	6.8	6.8	6.8	6.8	6.8
FTD	26MAR91:22:15	45.00	90.75	-	0	7.1	6.8	6.9	7.1	7.1	7.3	7.5	7.5	7.5	7.5	7.5	7.5
FTD	26MAR91:22:17	47.50	90.75	-	0	8.1	-0.2	-0.0	0.1	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.6
FTD	26MAR91:22:20	50.00	90.75	-	0	7.1	6.9	7.0	7.1	7.1	7.3	7.6	7.6	7.6	7.6	7.6	7.6
FTD	26MAR91:22:22	52.50	90.75	-	0	5.3	5.0	5.1	5.3	5.1	5.6	5.9	5.5	5.5	5.5	5.5	5.5
FTD	26MAR91:23:44	17.50	90.75	-	0	4.9	4.5	4.7	4.9	4.8	5.1	5.5	5.5	5.5	5.5	5.5	5.5
FTD	26MAR91:23:49	20.00	90.75	-	0	6.9	6.7	6.8	6.9	6.8	7.1	7.5	7.5	7.5	7.5	7.5	7.5
FTD	26MAR91:23:52	22.50	90.75	-	0	6.1	5.7	5.9	6.1	6.0	6.3	6.6	6.6	6.6	6.6	6.6	6.6
FTD	26MAR91:23:54	25.00	90.75	-	0	6.1	5.7	5.9	6.1	6.0	6.3	6.6	6.6	6.6	6.6	6.6	6.6
FTD	26MAR91:23:57	27.50	90.75	-	0	6.1	5.8	6.0	6.1	6.1	6.4	6.8	6.8	6.8	6.8	6.8	6.8
FTD	26MAR91:23:59	30.00	90.75	-	0	6.3	6.1	6.2	6.3	6.3	6.6	7.0	7.0	7.0	7.0	7.0	7.0
FTD	27MAR91:00:02	32.50	90.75	-	0	5.9	5.7	5.8	5.9	5.9	6.2	6.6	6.6	6.6	6.6	6.6	6.6
FTD	27MAR91:00:04	35.00	90.75	-	0	6.0	5.7	5.8	6.0	6.0	6.3	6.6	6.6	6.6	6.6	6.6	6.6
FTD	27MAR91:00:07	37.50	90.75	-	0	6.4	6.2	6.3	6.4	6.4	6.6	6.9	6.9	6.9	6.9	6.9	6.9
FTD	27MAR91:00:09	40.00	90.75	-	0	6.4	6.2	6.3	6.4	6.4	6.6	6.9	6.9	6.9	6.9	6.9	6.9
FTD	27MAR91:00:12	42.50	90.75	-	0	5.8	5.5	5.6	5.8	5.8	6.0	6.3	6.3	6.3	6.3	6.3	6.3
FTD	27MAR91:00:14	45.00	90.75	-	0	5.7	5.4	5.5	5.7	5.6	6.0	6.2	6.4	6.4	6.4	6.4	6.4
FTD	27MAR91:00:17	47.50	90.75	-	0	5.3	5.0	5.2	5.3	5.3	5.5	5.8	5.8	5.8	5.8	5.8	5.8
FTD	27MAR91:00:19	50.00	90.75	-	0	6.1	5.7	5.8	6.1	5.9	6.7	7.1	7.1	7.1	7.1	7.1	7.1
FTD	27MAR91:01:51	17.50	90.75	-	0	6.1	5.6	5.8	6.1	6.1	6.7	7.0	7.0	7.0	7.0	7.0	7.0
FTD	27MAR91:01:53	20.00	90.75	-	0	6.2	5.8	6.0	6.2	6.1	6.5	7.0	7.0	7.0	7.0	7.0	7.0
FTD	27MAR91:01:56	22.50	90.75	-	0	6.4	3.9	4.1	4.4	4.2	4.8	5.2	5.2	5.2	5.2	5.2	5.2
FTD	27MAR91:01:58	25.00	90.75	-	0	5.4	4.9	5.1	5.4	5.3	5.8	6.5	6.5	6.5	6.5	6.5	6.5
FTD	27MAR91:02:01	27.50	90.75	-	0	5.0	4.6	4.8	5.0	4.9	5.4	6.2	6.2	6.2	6.2	6.2	6.2
FTD	27MAR91:02:04	30.00	90.75	-	0	5.1	4.7	4.8	5.1	4.9	5.5	6.0	6.0	6.0	6.0	6.0	6.0
FTD	27MAR91:02:06	32.50	90.75	-	0	5.1	4.7	4.8	5.1	4.9	5.5	6.0	6.0	6.0	6.0	6.0	6.0

LANEBOARD - MID-INTEROP																									
LINE	TIME	ALTIMETER (Degrees)	ELEVATION (Degrees)	BIDN (Degrees)	RAA	HAZ (Deg.)	MINIMUM (Deg.)	PERC. OS (Deg.)	MEDIAN (Deg.)	MODE (Deg.)	PERC. 95 (Deg.)	MAXIMUM (Deg.)	MIN. 90 (Deg.)	SD (Deg.)	ENTROPY (Information)	SKIN DEPTH (Information)	ENTROPY (Information)	CLUTTER (Deg.)	RETROSCOP (Information)	CNT. 05 (Deg.)	CNT. 25 (Deg.)	CNT. 50 (Deg.)	CNT. 75 (Deg.)	CNT. 95 (Deg.)	
F10	27MAR91:02:09	35.00	90.75	-	0	5.4	5.8	5.2	5.5	5.5	5.8	5.9	0.6	0.2	1.37	-0.02	-0.9	-	-	-0.1	-0.1	0.0	0.0	0.1	
F10	27MAR91:02:11	37.50	90.75	-	0	5.5	5.8	5.2	5.6	5.5	5.9	6.1	0.6	0.2	1.39	0.08	-0.3	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:02:14	40.00	90.75	-	0	6.3	6.8	6.1	6.3	6.2	6.6	6.9	0.5	0.1	1.09	0.71	0.4	-	-	-0.8	0.0	0.0	0.0	0.1	
F10	27MAR91:02:17	42.50	90.75	-	0	4.5	4.2	4.4	4.6	4.5	4.9	5.2	0.5	0.2	1.17	0.94	1.2	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:02:19	45.00	90.75	-	0	4.6	4.2	4.4	4.6	4.5	4.9	5.2	0.5	0.2	1.15	0.74	0.5	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:02:22	47.50	90.75	-	0	4.6	4.2	4.4	4.6	4.5	5.0	5.2	0.6	0.2	1.31	0.56	-0.1	0.2	0.18	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:02:25	50.00	90.75	-	0	5.5	5.2	5.3	5.5	5.5	5.8	6.1	0.5	0.1	1.09	0.63	0.4	0.1	0.18	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:03:45	17.50	90.75	-	0	6.9	6.6	6.6	6.8	6.7	7.3	7.5	0.7	0.2	1.54	0.51	-0.9	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:03:47	20.00	90.75	-	0	6.7	6.3	6.4	6.7	6.5	7.1	7.4	0.7	0.2	1.49	0.49	-0.8	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:03:50	22.50	90.75	-	0	6.8	6.4	6.6	6.8	6.7	7.1	7.3	0.5	0.2	1.13	0.59	-0.2	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:03:53	25.00	90.75	-	0	6.5	5.9	6.3	6.6	6.5	6.8	7.0	0.5	0.2	1.20	0.53	0.7	-	-	-0.1	-0.0	0.3	0.0	0.1	
F10	27MAR91:03:56	27.50	90.75	-	0	7.8	6.7	6.9	7.0	6.9	7.2	7.5	0.4	0.1	0.87	0.47	-0.1	-	-	-0.0	-0.0	0.0	0.0	0.0	
F10	27MAR91:03:59	30.00	90.75	-	0	7.4	7.1	7.3	7.4	7.4	7.7	7.9	0.4	0.1	0.90	0.33	-0.2	-	-	-0.0	-0.0	0.0	0.0	0.0	
F10	27MAR91:04:02	32.50	90.75	-	0	7.5	7.2	7.4	7.5	7.4	7.7	8.0	0.4	0.1	0.97	0.67	0.4	-	-	-0.0	0.0	0.0	0.0	0.0	
F10	27MAR91:04:04	35.00	90.75	-	0	6.8	6.5	6.6	6.8	6.8	7.1	7.3	0.5	0.1	1.09	0.50	-0.3	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:04:07	37.50	90.75	-	0	6.8	6.5	6.7	6.8	6.7	7.0	7.2	0.3	0.1	0.85	0.55	0.3	-	-	-0.0	0.0	0.0	0.0	0.0	
F10	27MAR91:04:10	40.00	90.75	-	0	7.6	7.4	7.5	7.6	7.5	7.8	8.0	0.3	0.1	0.83	0.73	0.4	-	-	-0.0	0.0	0.0	0.0	0.0	
F10	27MAR91:04:13	42.50	90.75	-	0	7.6	7.3	7.5	7.6	7.6	7.8	8.1	0.3	0.1	0.86	0.61	0.6	-	-	-0.0	0.0	0.0	0.0	0.0	
F10	27MAR91:04:16	45.00	90.75	-	0	7.4	7.1	7.2	7.4	7.4	7.5	7.8	0.3	0.1	0.79	0.19	0.7	-	-	-0.0	0.0	0.0	0.0	0.0	
F10	27MAR91:04:19	47.50	90.75	-	0	6.7	6.4	6.5	6.7	6.6	6.9	7.2	0.4	0.1	0.99	0.60	0.4	0.1	0.29	-0.0	0.0	0.0	0.0	0.0	
F10	27MAR91:04:22	50.00	90.75	-	0	7.3	6.9	7.1	7.3	7.3	7.5	7.8	0.5	0.1	1.13	0.11	0.1	0.1	0.10	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:05:49	17.50	90.75	-	0	3.8	3.4	3.6	3.8	3.7	4.1	4.4	0.5	0.1	1.21	0.37	-0.2	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:05:52	20.00	90.75	-	0	10.8	10.4	10.6	10.8	10.7	11.1	11.5	0.5	0.2	1.22	0.57	-0.8	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:05:55	22.50	90.75	-	0	7.6	7.3	7.5	7.6	7.6	7.9	8.2	0.4	0.1	1.00	0.69	0.5	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:05:57	25.00	90.75	-	0	7.2	6.7	6.9	7.2	7.1	7.5	7.8	0.6	0.2	1.27	0.54	-0.0	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:06:00	27.50	90.75	120.46	3	7.2	6.7	7.0	7.2	7.1	7.5	7.9	0.5	0.1	1.12	0.72	0.5	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:02	30.00	90.75	122.62	3	7.6	7.3	7.5	7.6	7.6	8.0	8.4	0.5	0.1	1.15	0.70	0.5	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:05	32.50	90.75	124.76	3	7.3	6.9	7.1	7.3	7.2	7.6	7.8	0.5	0.1	1.18	0.57	0.8	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:07	35.00	90.75	126.72	3	7.3	6.9	7.1	7.3	7.3	7.6	7.8	0.5	0.1	1.19	0.53	-0.5	-	-	-0.1	-0.0	0.0	0.0	0.1	
F10	27MAR91:06:10	37.50	90.75	128.85	3	7.3	6.9	7.1	7.3	7.2	7.6	7.9	0.5	0.1	1.20	0.52	0.2	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:12	40.00	90.75	132.80	3	8.2	7.9	8.1	8.2	8.2	8.5	8.8	0.4	0.1	1.02	0.87	0.7	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:15	42.50	90.75	132.93	3	6.8	6.4	6.6	6.8	6.7	7.1	7.5	0.5	0.1	1.23	0.59	0.6	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:17	45.00	90.75	134.06	3	5.6	5.1	5.4	5.6	5.6	5.9	6.3	0.5	0.1	1.16	0.66	0.7	-	-	-0.0	0.0	0.0	0.0	0.1	
F10	27MAR91:06:20	47.50	90.75	134.97	4	5.7	5.2	5.5	5.7	5.6	6.0	6.3	0.6	0.2	1.27	0.44	0.1	0.1	0.28	-0.1	0.0	0.0	0.0	0.1	
F10	27MAR91:06:22	50.00	90.75	138.89	4	5.8	5.3	5.6	5.8	5.7	6.1	6.4	0.5	0.1	1.17	0.70	0.6	0.1	0.24	-0.0	0.0	0.0	0.0	0.1	
F10	11JUL91:05:19	50.50	90.75	-	0	6.8	5.7	6.1	6.9	7.4	7.9	1.3	0.4	1.09	-0.45	-0.4	0.3	0.23	-0.1	-0.0	0.0	0.0	0.1	0.2	
F10	11JUL91:05:21	53.00	90.75	-	0	6.8	5.8	6.2	6.9	7.1	7.4	7.8	1.2	0.4	1.08	-0.34	-0.6	0.3	0.23	-0.1	-0.0	0.0	0.0	0.2	

		WAVELENGTH : RED-IR (NM)																											
TIME	SITE	AZIMUTH (deg)	ELEVATION (deg)	BIOM (Degrees)	BOA	MEAN (deg)	MIN (deg)	MAX (deg)	PARC (deg)	MEDIAN (deg)	MOD (deg)	PARC (deg)	MOD (deg)	PARC (deg)	MAX (deg)	RDI (deg)	ENTROPY (Information)	REDNESS (Information)	RUMINOSIS (Information)	CLUTTER (deg)	REYNOLDS (Information)	CUT_03 (deg)	CUT_25 (deg)	CUT_50 (deg)	CUT_75 (deg)	CUT_95 (deg)			
FTD	11.AUG.91:06:59	28.00	90.75	133.06	3	14.1	13.3	13.7	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	0.6	0.3	1.95	0.96	3.1	-	-0.2	-0.0	0.0	0.1	0.1		
FTD	11.AUG.91:07:02	30.50	90.75	135.47	6	14.1	13.3	13.6	14.1	13.9	15.2	17.6	1.6	0.6	1.05	3.15	12.4	-	-	-	-	-0.4	-0.1	0.0	0.1	0.4			
FTD	11.AUG.91:07:05	33.00	90.75	137.15	6	14.8	14.8	14.8	14.8	15.3	17.9	0.9	0.4	1.75	3.62	18.6	-	-	-	-	-	-0.4	-0.1	0.0	0.1	0.1			
FTD	11.AUG.91:07:09	35.50	90.75	138.79	6	15.1	13.7	14.2	15.2	15.4	16.8	18.4	1.8	0.8	2.60	6.19	1.2	-	-	-	-	-0.5	-0.2	-0.0	0.2	0.5			
FTD	11.AUG.91:07:12	38.00	90.75	140.39	6	15.5	14.7	15.8	15.6	15.3	16.2	16.4	1.2	0.4	1.92	0.77	0.2	-	-	-	-	-0.1	-0.0	0.0	0.1	0.2			
FTD	11.AUG.91:07:15	40.50	90.75	141.73	6	15.8	13.7	14.8	15.1	15.6	15.8	16.9	1.8	0.6	2.38	-0.33	-0.6	-	-	-	-	-0.2	-0.0	0.1	0.2	0.6			
FTD	11.AUG.91:07:18	43.00	90.75	143.23	6	16.7	17.7	18.2	18.6	18.6	19.4	20.4	1.3	0.4	2.83	0.73	0.7	-	-	-	0.2	-0.1	0.0	0.1	0.4				
FTD	11.AUG.91:07:22	45.00	90.75	144.66	6	16.9	18.1	18.5	18.9	18.7	19.3	20.0	0.8	0.2	1.64	0.51	0.7	-	-	-	0.2	0.12	-0.1	0.0	0.1				
FTD	11.AUG.91:07:25	48.00	90.75	146.04	6	19.0	18.4	18.7	19.0	18.9	19.5	20.2	0.8	0.2	1.61	0.59	0.6	-	-	-	0.2	0.08	-0.1	0.0	0.1				
FTD	11.AUG.91:07:28	50.50	90.75	147.12	6	16.8	18.5	18.7	19.1	19.5	19.6	19.9	20.7	0.8	0.2	1.67	0.47	0.6	-	-	0.2	0.08	-0.1	0.0	0.1				
FTD	11.AUG.91:07:31	53.00	90.75	148.36	6	19.3	18.7	19.1	19.5	19.6	19.9	20.7	0.8	0.2	1.67	0.47	0.6	-	-	-	0.2	0.18	-0.1	0.0	0.1				
FTD	11.AUG.91:07:34	55.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:36	58.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:39	60.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:42	63.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:45	65.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:48	68.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:51	70.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:54	73.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:07:57	75.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:00	78.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:03	80.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:06	83.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:09	85.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:12	88.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:15	90.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:18	93.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:21	95.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:24	98.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:27	100.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:30	103.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:33	105.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:36	108.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:39	110.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:42	113.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:45	115.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:48	118.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:51	120.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:54	123.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:08:57	125.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:00	128.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:03	130.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:06	133.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:09	135.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:12	138.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:15	140.50	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:18	143.00	90.75	149.47	6	19.1	18.3	18.7	19.1	19.8	19.7	20.2	0.9	0.3	1.79	0.27	0.0	-	-	-	0.2	0.12	-0.1	-0.3	0.0				
FTD	11.AUG.91:09:21	145.50	90.75	149.47	6	19.1	18.3	18.7																					

SITE	TIME	ASTRINOMICAL DATA										CLIMATE DATA										HYDROLOGICAL DATA										ECOLOGICAL DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		RA (deg)	DEC (deg)	ALT (deg)	HAZ (deg)	MIN (deg)	SEC (deg)	MEDIAN (deg)	MOD (deg)	PERC 95 (deg)	MAX (deg)	RA (deg)	DEC (deg)	HAZ (deg)	MIN (deg)	SEC (deg)	MEDIAN (deg)	MOD (deg)	PERC 95 (deg)	MAX (deg)	RA (deg)	DEC (deg)	HAZ (deg)	MIN (deg)	SEC (deg)	MEDIAN (deg)	MOD (deg)	PERC 95 (deg)	MAX (deg)	RA (deg)	DEC (deg)	HAZ (deg)	MIN (deg)	SEC (deg)	MEDIAN (deg)	MOD (deg)	PERC 95 (deg)	MAX (deg)	RA (deg)	DEC (deg)	HAZ (deg)	MIN (deg)	SEC (deg)	MEDIAN (deg)	MOD (deg)	PERC 95 (deg)	MAX (deg)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
FTD	11.AUG.01:11:18	50.50	95.75	95.00	3	20.1	19.9	19.5	20.1	19.7	21.4	25.4	1.9	0.6	2.30	1.67	4.1	0.6	-0.81	-0.3	-0.1	0.8	0.2	0.4	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	95.00	95.75	95.00	3	22.1	19.4	20.7	22.1	21.9	23.8	26.7	3.1	0.9	2.80	0.13	0.2	0.1	0.3	0.9	0.75	9

SITE		TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	BLDTH (Degrees)	RA	MINIMUM (Deg.)	MEAN (Deg.)	MAXIMUM (Deg.)	PERC. (Deg.)	MAXIMUM (Deg.)	RA (Deg.)	ENTROPY (Dimensionless)	SEGMENTATION (Dimensionless)	CLUSTER (Dimensionless)	RETINOS (Dimensionless)	CNT.5 (Deg.)	CNT.5 (Deg.)	CNT.5 (Deg.)	CNT.5 (Deg.)	CNT.5 (Deg.)	CNT.5 (Deg.)	CNT.5 (Deg.)	CNT.5 (Deg.)
YPG	13SEP00:04:20	169.50	91.33	-	0	27.7	26.4	26.9	27.8	27.7	28.5	29.2	1.7	0.5	2.33	0.02	-0.4	0.3	0.32	-0.2	-0.0	0.0	0.1	0.3
YPG	13SEP00:04:24	172.00	91.33	-	0	27.5	26.0	26.5	27.5	28.1	28.4	29.0	1.9	0.6	2.48	-0.09	-0.8	0.3	0.45	-0.2	-0.0	0.0	0.1	0.3
YPG	13SEP00:04:27	190.00	91.33	-	0	27.2	26.1	26.5	27.2	26.9	28.3	28.6	1.8	0.5	2.25	0.64	-0.1	0.4	0.19	-0.1	0.0	0.0	0.1	0.2
YPG	13SEP00:04:31	192.50	91.33	-	0	27.9	26.9	27.3	27.9	27.9	29.0	29.5	1.8	0.5	2.19	0.66	-0.0	0.4	0.15	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:04:34	195.00	91.33	-	0	27.3	26.3	26.7	27.3	27.3	28.4	28.7	1.7	0.5	2.19	0.71	0.1	0.4	0.10	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:04:38	197.50	91.33	-	0	27.3	26.2	26.6	27.3	27.2	28.4	28.8	1.8	0.5	2.28	0.41	-0.2	0.5	0.05	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:04:41	200.00	91.33	-	0	27.2	26.0	26.6	27.3	27.3	28.2	28.5	1.6	0.5	2.19	0.37	-0.0	0.4	0.16	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:04:45	202.83	91.33	-	0	27.4	26.4	26.8	27.4	27.4	28.3	28.6	1.4	0.4	2.09	0.42	-0.2	0.3	0.26	-0.1	0.0	0.0	0.1	0.2
YPG	13SEP00:04:49	235.33	92.33	-	0	27.2	25.9	26.6	27.3	27.4	27.9	28.8	1.3	0.4	2.09	-0.16	-0.2	0.3	0.27	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:04:53	157.00	91.33	-	0	27.0	26.0	26.4	27.0	27.0	27.5	28.2	1.1	0.3	1.82	0.17	0.4	0.2	0.32	-0.1	0.0	0.0	0.1	0.1
YPG	13SEP00:04:57	159.50	91.33	-	0	27.5	26.1	26.9	27.5	28.1	29.0	1.2	0.4	2.06	-0.03	0.2	0.3	0.18	-0.2	-0.0	0.0	0.1	0.3	
YPG	13SEP00:05:01	162.00	91.33	-	0	27.6	26.4	27.0	27.6	27.5	28.2	28.7	1.2	0.3	2.01	-0.15	-0.4	0.3	0.23	-0.1	0.0	0.0	0.1	0.2
YPG	13SEP00:05:05	164.50	91.33	-	0	27.9	26.6	27.3	28.0	27.3	28.6	29.3	1.3	0.4	2.08	-0.26	-0.4	0.3	0.14	-0.2	0.0	0.0	0.1	0.3
YPG	13SEP00:05:09	167.00	91.33	-	0	28.0	26.3	27.3	28.0	27.9	28.8	29.3	1.4	0.4	2.17	0.08	-0.5	0.3	0.31	-0.1	0.0	0.0	0.1	0.2
YPG	13SEP00:05:13	169.50	91.33	-	0	27.6	26.3	26.9	27.7	27.7	28.5	28.9	1.6	0.5	2.30	-0.03	-0.7	0.3	0.29	-0.2	-0.0	0.0	0.1	0.3
YPG	13SEP00:05:17	172.00	91.33	-	0	27.7	26.3	26.9	27.7	28.2	28.5	29.0	1.7	0.5	2.33	-0.11	-1.0	0.3	0.41	-0.2	-0.0	0.0	0.1	0.3
YPG	13SEP00:05:21	190.00	91.33	-	0	27.8	26.8	27.1	27.8	27.7	28.7	29.1	1.6	0.5	2.23	0.32	-1.0	0.2	0.48	-0.2	0.0	0.0	0.1	0.2
YPG	13SEP00:05:25	192.50	91.33	-	0	27.8	26.5	27.0	27.7	27.6	28.7	29.4	1.7	0.5	2.31	0.19	-0.7	0.3	0.40	-0.2	0.0	0.0	0.1	0.2
YPG	13SEP00:05:29	195.00	91.33	-	0	28.5	27.1	27.7	28.5	28.6	29.3	30.1	1.5	0.4	2.19	0.14	-0.7	0.3	0.33	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:05:33	197.50	91.33	-	0	28.5	27.1	27.7	28.5	28.6	29.3	29.1	1.6	0.5	2.23	-0.09	-0.4	0.3	0.36	-0.2	-0.0	0.0	0.1	0.2
YPG	13SEP00:05:37	200.00	91.33	-	0	27.1	25.7	26.3	27.1	27.1	28.0	28.5	1.7	0.5	2.23	-0.11	-0.0	0.3	0.34	-0.2	-0.0	0.0	0.1	0.3
YPG	13SEP00:05:41	202.83	91.33	-	0	27.3	26.0	26.6	27.4	27.5	28.0	28.7	1.4	0.4	2.12	-0.41	-0.0	0.3	0.27	-0.1	-0.0	0.0	0.1	0.2
YPG	13SEP00:05:45	235.33	92.33	-	0	27.4	26.1	26.8	27.5	27.4	28.2	28.8	1.4	0.4	2.16	-0.15	-0.3	0.2	0.25	-0.2	-0.0	0.0	0.1	0.3
YPG	13SEP00:05:49	157.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:05:53	159.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:05:57	162.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:01	164.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:05	167.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:09	169.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:13	172.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:17	190.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:21	192.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:25	195.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:29	197.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:33	200.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:37	202.83	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:41	235.33	92.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:45	157.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:49	159.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:53	162.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:06:57	164.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:01	167.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:05	169.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:09	172.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:13	190.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:17	192.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:21	195.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:25	197.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:29	200.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:33	202.83	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:37	235.33	92.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:41	157.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:45	159.50	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1	0.3
YPG	13SEP00:07:49	162.00	91.33	-	0	27.3	26.0	26.6	27.4	27.4	28.2	28.8	1.4	0.4	2.16	0.19	-0.3	0.5	0.13	-0.3	-0.1	0.0	0.1</	

TIME	LATITUDE (Degrees)	ELEVATION (Degrees)	BIRD (Degrees)	MOA (Degrees)	NIR (Degrees)	MIR (Degrees)	MOR (Degrees)	MIDIR (Degrees)	MOD (Degrees)	PINC (Degrees)	BOA (Degrees)	RND (Degrees)	SOS (Degrees)	ENTRORY (Degrees)	SEAFWES (Degrees)	RATIOSIS (Degrees)	CLUTTER (Degrees)	METHODS (Degrees)	CMT_05 (Degrees)	CMT_25 (Degrees)	CMT_50 (Degrees)	CMT_75 (Degrees)	CMT_95 (Degrees)	LAT_95 (Degrees)	LAT_75 (Degrees)	LAT_50 (Degrees)	LAT_25 (Degrees)	LAT_05 (Degrees)	LONG_05 (Degrees)	LONG_25 (Degrees)	LONG_50 (Degrees)	LONG_75 (Degrees)	LONG_95 (Degrees)			
13SEP00:10:00	159.50	91.33	123.08	3	36.5	33.0	33.9	36.7	37.2	39.6	41.5	5.8	1.8	3.54	0.20	-0.8	1.5	2.19	-1.0	-0.3	0.1	0.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
13SEP00:10:18	164.50	91.33	120.69	3	35.0	32.5	33.2	36.2	33.5	39.3	40.8	6.1	2.0	3.54	0.13	-1.1	1.5	0.17	-0.9	-0.2	0.1	0.8	2.3	1.4	1.2	1.4	1.2	1.4	1.2	1.4	1.2	1.4	1.2	1.4	1.2	1.4
13SEP00:10:23	167.00	91.33	119.53	3	36.5	28.6	30.2	35.0	30.2	42.0	44.6	11.7	3.9	4.19	0.13	-1.2	3.5	0.10	-0.2	-0.5	0.1	0.8	2.3	1.4	1.2	1.4	1.2	1.4	1.2	1.4	1.2	1.4	1.2	1.4	1.2	1.4
13SEP00:10:27	169.00	91.33	118.43	3	37.4	33.2	34.6	37.5	35.0	40.9	42.0	6.2	1.9	3.58	0.17	-0.9	1.9	0.03	-1.2	-0.2	0.1	0.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4
13SEP00:10:32	172.00	91.33	117.34	3	37.9	34.0	35.2	38.1	39.1	41.0	42.6	5.8	1.9	3.54	0.10	-0.9	1.4	0.23	-1.0	-0.3	0.1	0.5	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:10:36	176.00	91.33	107.95	3	36.4	33.9	34.5	35.6	34.0	42.6	44.6	6.0	2.0	3.32	0.04	-0.4	1.4	0.32	-1.2	-0.2	0.0	0.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:10:41	192.50	91.33	106.94	3	37.1	35.1	35.7	36.8	36.0	40.9	43.6	5.2	1.6	3.11	1.61	2.2	1.5	0.09	-0.9	-0.3	0.0	0.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
13SEP00:10:45	195.00	91.33	105.18	3	40.3	37.9	38.5	39.9	38.5	44.1	46.2	5.6	1.7	3.35	1.09	0.6	1.0	0.26	-0.8	-0.3	0.0	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:10:50	197.00	91.33	105.42	3	39.9	37.2	37.8	39.2	38.1	44.1	48.9	6.3	2.1	3.35	1.50	2.4	1.6	0.26	-1.2	-0.4	0.0	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:10:54	200.00	91.33	105.18	3	37.2	36.5	35.2	36.7	36.7	40.7	45.1	5.4	1.8	3.38	0.97	0.5	1.6	0.09	-0.9	-0.3	0.0	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:10:59	202.83	91.33	103.40	3	37.2	34.9	35.3	35.5	35.6	41.0	46.0	5.5	1.9	3.28	1.10	1.8	1.4	0.26	-1.0	-0.3	0.0	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:11:04	235.33	92.33	84.72	2	41.1	36.6	37.3	41.5	37.8	46.4	49.6	9.0	2.8	3.86	0.37	-0.5	2.3	0.17	-1.9	-0.7	-0.1	0.5	2.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
13SEP00:11:05	159.50	91.33	119.03	3	44.0	39.8	40.8	44.5	45.4	47.6	49.7	6.8	2.2	3.69	0.32	-1.0	1.7	0.27	-1.2	-0.4	0.1	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:11:59	162.00	91.33	118.77	3	44.5	40.1	41.1	44.8	41.9	49.3	5.3	2.2	3.43	-0.04	-1.1	1.5	0.32	-0.9	-0.3	0.1	0.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
13SEP00:12:03	164.00	91.33	118.54	3	44.2	39.9	40.9	44.6	41.1	48.1	49.5	7.2	2.4	3.66	0.02	-1.2	2.0	0.15	-1.1	-0.2	0.1	0.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:12:07	167.00	91.33	118.28	3	65.2	51.3	42.0	45.5	42.1	49.1	50.5	7.0	2.3	3.66	0.09	-1.1	2.0	0.13	-1.2	-0.3	0.1	0.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:12:11	169.50	91.33	118.11	3	65.4	61.6	42.0	45.7	42.5	49.3	50.4	7.2	2.3	3.72	0.01	-1.0	2.2	0.05	-1.4	-0.3	0.1	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13SEP00:12:11	169.50	91.33	118.11	3	65.4	61.6	42.0	45.7	42.5	49.3	50.4	7.2	2.3	3.72	0.01	-1.0	2.2	0.05	-1.4	-0.3	0.1	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13SEP00:12:15	172.00	91.33	117.96	3	43.8	39.6	40.6	44.1	43.4	47.4	49.3	6.7	2.1	3.66	0.03	-0.8	1.6	0.23	-1.3	-0.3	0.1	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13SEP00:12:20	192.50	91.33	116.33	3	42.9	40.2	40.8	41.9	41.0	47.8	49.8	7.0	2.3	3.39	1.08	-0.1	1.6	0.32	-1.4	-0.3	-0.1	0.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:12:24	192.50	91.33	116.33	3	42.9	40.2	40.8	41.9	41.0	47.8	49.8	7.0	2.3	3.39	1.08	-0.1	1.6	0.32	-1.4	-0.3	-0.1	0.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:12:26	195.00	91.33	116.21	3	43.4	40.7	41.5	42.8	41.5	47.7	50.0	6.1	1.9	3.38	1.15	0.6	1.7	0.11	-0.9	-0.4	0.0	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13SEP00:12:32	197.00	91.33	116.19	3	43.8	41.2	41.7	43.1	41.9	48.4	53.2	6.6	2.3	3.47	1.51	2.2	1.7	0.22	-1.3	-0.4	-0.1	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:12:36	200.00	91.33	116.13	3	42.8	39.9	40.6	42.1	41.9	46.5	49.5	5.9	1.9	3.44	1.59	2.6	1.8	0.06	-1.1	-0.4	-0.1	0.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:12:40	202.83	91.33	116.03	3	42.0	39.8	40.3	41.5	40.5	46.0	50.8	5.7	1.9	3.27	1.39	2.4	1.4	0.20	-1.2	-0.3	-0.1	0.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
13SEP00:12:45	235.33	92.33	106.30	3	45.3	40.5	41.3	45.5	41.5	51.0	54.8	9.8	3.1	3.93	0.36	-0.6	2.5	0.17	-2.2	-0.7	-0.1	0.5	2.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
13SEP00:12:55	157.00	91.33	105.12	3	44.1	38.3	39.5	45.0	45.7	47.2	50.2	7.9	2.6	3.79	-0.35	-1.0	2.0	0.24	-1.7	-0.5	0.2	0.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
13SEP00:14:01	159.50	91.33	105.61	3	42.7	36.4	37.8	43.6	44.1	47.2	49.7	9.4	3.1	3.93	-0.35	-1.0	2.0	0.24	-1.7	-0.5	0.2	0.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
13SEP00:14:07	162.00	91.33	108.16	3	42.8	37.4	38.5	43.4	38.6	47.5	49.1	9.0	3.0	3.84	-0.11	-1.2	2.0	0.31	-1.2	-0.3	0.2	0.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
13SEP00:14:13	164.50	91.33	106.77	3	43.3	36.9	39.7	44.3	46.1	48.4	49.8	8.6	2.8	3.81	-0.06	-1.2	2.4	0.14	-1.3	-0.2	0.1	0.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
13SEP00:14:19	167.00	91.33	107.34	3	43.9	39.3	40.1	44.2	40.2	48.4	50.0	8.7	2.9	3.69	-0.18	-1.1	2.6	0.06	-1.7	-0.4	0.1	0.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
13SEP00:14:25	169.50	91.33	108.90	3	42.4	36.4	38.0	43.0	43.7	46.8	48.2	8.0	2.5	3.83	-0.06	-0.9	1.9	0.23	-1.6	-0.4	0.1	0.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
13SEP00:14:31	172.00	91.33	105.91	3	42.4	37.1	38.4	42.7	42.9	46.5	48.7	8.0	2.9	3.70	0.05	-1.1	2.3	0.16	-1.4	-0.3	0.1	0.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
13SEP00:14:38	190.00	91.33	118.22	3	61.9	38.9	39.7	40.9	40.0	47.6	50.0	7.9	2.6	3.66	1.24	0.4	1.9	0.26	-1.6	-0.3	0.0	0.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
13SEP00:14:44	192.50	91.33	119.28	3	61.1	38.6	39.4	40.4	39.8	45.8	49.0	6.2	1.9	3.24	1.68	2.4	1.6	0.15	-1.1	-0.3	0.0	0.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
13SEP00:14:50	195.00	91.33	120.40	3	41.4	36.7	37.6	40.8	39.7	45.4	47.4	5.8	1.9	3.33	1.09	0.4	1.7	0.11	-0.9	-0.4	0.0	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13SEP00:14:56	197.00	91.33	121.57	3	41.7	38.9	39.5	40.8	39.0	46.8	51.6	7.3	2.4	3.51	1.06	2.3	1.9	0.24	-1.4	-0.4	-0.1	0.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9</					

TIME		WAVEBAND : W10-1R (NOF)															
DATE	TIME	ALTIMETER (Degrees)	ELEVATION (Degrees)	ROLL (Degrees)	HEAVE (m)	MINIMUM (m)	MEAN (m)	MAXIMUM (m)	RMSE (m)	RMSE (m)	RMSE (m)	RMSE (m)	RMSE (m)	RMSE (m)	RMSE (m)	RMSE (m)	RMSE (m)
13SEP90:15:00	202.83	91.33	124.27	3	41.4	39.0	39.6	40.6	40.0	45.0	52.1	5.5	1.9	3.29	1.95	5.2	1.3
13SEP90:15:15	235.33	92.33	134.06	3	43.8	39.3	40.4	43.3	40.7	49.6	53.1	9.2	2.9	3.82	0.64	-0.3	2.3
13SEP90:16:00	157.00	91.33	86.48	2	44.7	41.9	42.0	45.1	46.5	47.0	48.0	5.0	1.7	3.37	-0.26	-1.1	1.0
13SEP90:16:03	159.50	91.33	87.95	2	44.6	39.9	40.9	45.3	46.2	47.7	49.1	6.8	2.3	3.63	-0.29	-1.2	1.5
13SEP90:16:07	162.00	91.33	89.46	2	45.0	41.8	41.8	45.4	42.2	48.2	49.1	6.4	2.2	3.57	-0.13	-1.4	1.6
13SEP90:16:11	164.50	91.33	91.00	3	44.6	40.8	41.5	44.9	46.5	47.7	48.6	6.1	2.1	3.52	-0.09	-1.4	1.8
13SEP90:16:15	167.00	91.33	92.72	3	43.6	39.3	40.6	43.7	40.7	47.0	48.2	6.5	2.2	3.61	0.05	-1.3	1.8
13SEP90:16:19	169.50	91.33	94.32	3	44.0	38.8	40.5	44.4	45.7	47.1	48.0	6.5	2.2	3.63	-0.27	-1.1	2.0
13SEP90:16:23	172.00	91.33	95.96	3	44.0	39.8	41.3	44.2	45.7	47.0	48.4	5.7	1.8	3.55	-0.04	-1.0	1.4
13SEP90:16:26	190.00	91.33	111.05	3	42.8	39.8	41.3	42.1	41.4	46.6	49.5	5.3	1.6	3.15	1.40	1.4	1.3
13SEP90:16:30	192.50	91.33	112.82	3	41.6	39.5	40.4	41.2	40.9	44.8	46.4	6.4	1.3	2.88	1.58	1.9	1.0
13SEP90:16:34	195.00	91.33	116.62	3	41.5	39.3	40.2	41.2	40.3	44.4	45.7	6.1	1.3	3.01	1.01	1.2	1.2
13SEP90:16:38	197.50	91.33	116.52	3	42.7	40.5	41.2	42.2	41.5	45.7	49.3	4.5	1.5	3.11	1.69	3.3	1.1
13SEP90:16:42	200.00	91.33	118.36	3	42.8	40.8	41.6	42.5	41.9	45.3	46.5	3.7	1.2	2.98	0.90	0.0	1.1
13SEP90:16:46	202.83	91.33	120.51	3	41.3	39.3	40.1	40.9	40.4	43.5	46.9	3.4	1.4	2.93	2.50	9.4	0.8
13SEP90:16:49	235.33	92.33	165.33	4	42.6	40.0	40.7	42.3	41.2	45.2	47.7	5.1	1.6	3.31	0.63	-0.4	1.3
13SEP90:17:45	157.00	91.33	70.40	2	42.7	40.2	41.0	42.8	43.2	44.8	46.2	3.7	1.1	3.11	0.28	-0.4	0.9
13SEP90:17:47	159.50	91.33	72.40	2	45.4	42.8	43.9	45.4	44.6	46.8	48.9	2.9	0.9	2.91	0.04	-0.7	0.7
13SEP90:17:50	162.00	91.33	74.56	2	45.0	42.9	43.6	45.1	44.1	46.7	47.4	3.1	1.0	2.94	0.04	-1.1	0.9
13SEP90:17:53	164.50	91.33	76.59	2	44.9	42.0	42.6	43.9	43.0	45.3	46.3	2.8	0.9	2.82	0.14	-1.2	0.8
13SEP90:17:55	167.00	91.33	78.63	2	43.8	41.4	42.5	43.7	43.2	45.4	46.4	2.8	0.9	2.86	0.29	-0.9	0.9
13SEP90:17:58	169.50	91.33	80.82	2	43.8	41.1	42.5	43.8	44.3	45.2	46.7	2.8	0.9	2.89	0.14	-0.4	0.8
13SEP90:18:01	172.00	91.33	82.88	2	43.4	41.5	42.3	43.5	42.8	44.7	45.7	2.5	0.8	2.74	0.06	-0.9	0.6
13SEP90:18:03	190.00	91.33	100.27	3	42.5	41.5	41.9	42.3	42.3	43.5	45.7	1.6	0.6	2.12	2.48	7.5	0.3
13SEP90:18:05	192.50	91.33	102.37	3	42.2	41.0	41.7	42.1	42.1	43.0	44.1	1.3	0.4	2.01	1.17	3.0	0.3
13SEP90:18:09	195.00	91.33	104.59	3	42.7	41.6	42.3	42.7	42.6	43.4	44.1	1.1	0.3	1.89	0.61	0.8	0.8
13SEP90:18:11	197.50	91.33	106.70	3	42.7	41.6	42.2	42.7	42.7	43.5	46.0	1.3	0.4	2.05	1.96	7.8	0.2
13SEP90:18:14	200.00	91.33	108.81	3	42.6	41.8	42.1	42.6	42.6	43.2	46.1	1.1	0.4	1.86	3.10	17.8	0.2
13SEP90:18:17	202.83	91.33	111.38	3	42.5	41.5	42.0	42.4	42.4	43.7	46.5	1.7	0.6	1.97	2.97	11.3	0.3
13SEP90:18:19	235.33	92.33	163.02	4	41.8	40.7	41.3	41.8	41.7	42.5	45.0	1.1	0.3	1.96	0.11	-0.0	0.3
13SEP90:20:00	157.00	91.33	-	0	35.5	34.6	35.2	35.5	35.3	36.0	36.7	0.6	0.3	1.72	0.63	1.1	0.3
13SEP90:20:03	159.50	91.33	-	0	35.4	34.5	35.0	35.4	35.3	35.9	36.6	0.9	0.3	1.73	0.17	-0.1	0.2
13SEP90:20:06	162.00	91.33	-	0	35.5	34.8	35.2	35.5	35.3	35.9	37.1	0.8	0.2	1.64	0.26	0.0	0.2
13SEP90:20:09	164.50	91.33	-	0	35.4	34.5	35.0	35.4	35.2	35.9	36.9	0.5	0.3	1.70	0.19	-0.0	0.2
13SEP90:20:12	167.00	91.33	-	0	35.3	34.3	34.9	35.4	35.4	35.8	36.7	0.9	0.3	1.74	0.05	-0.1	0.3
13SEP90:20:15	169.50	91.33	-	0	35.4	34.5	34.9	35.4	35.3	35.9	37.7	0.9	0.3	1.82	0.55	2.4	0.3
13SEP90:20:18	172.00	91.33	-	0	35.4	34.5	35.0	35.5	35.3	35.9	36.6	0.9	0.3	1.73	-0.15	0.1	0.2

WAVEBAND : MID-IR(SIX)

SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BOLIN (Degrees)	NOA	MEAN (Deg. C)	MINIMUM (Deg. C)	PERCENT (Deg. C)	MEDIAN (Deg. C)	MODE (Deg. C)	PERCENT (Deg. C)	MAXIMUM (Deg. C)	RND.90 (Deg. C)	SD (Deg. C)	ENTROPY (Info/ont.ess)	REYNOLDS (Info/ont.ess)	KURTOSIS (Info/ont.ess)	CLUSTER (Info/ont.ess)	REYNOLDS (Info/ont.ess)	CNT.05 (Deg. C)	CNT.25 (Deg. C)	CNT.50 (Deg. C)	CNT.75 (Deg. C)	CNT.95 (Deg. C)		
APC	20MAR91:04:45	37.50	91.16	-	0	0.3	-1.9	-1.3	0.6	0.8	1.8	1.6	2.3	0.7	2.31	-1.34	0.9	0.5	0.27	-0.2	0.0	0.0	0.0	0.1	0.1	
APC	20MAR91:04:46	39.50	91.17	-	0	0.1	-2.3	-1.6	0.4	0.6	1.0	1.4	2.6	0.8	2.46	-1.23	0.5	0.4	0.67	-0.4	0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:04:48	42.00	91.17	-	0	-0.5	-3.0	-2.3	-0.1	0.2	0.5	1.1	2.8	0.9	2.57	-1.09	0.0	0.5	0.41	-0.4	-0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:04:49	44.50	91.17	-	0	0.1	-2.5	-1.9	0.5	1.0	1.2	1.7	3.1	1.0	2.70	-0.84	-0.6	0.7	0.32	-0.4	0.0	0.0	0.0	0.1	0.2	
APC	20MAR91:04:51	47.00	91.17	-	0	-0.2	-2.3	-1.9	0.3	0.6	1.0	1.2	2.9	1.0	2.60	-0.57	-1.2	0.8	0.20	-0.2	-0.0	0.0	0.0	0.1	0.2	
APC	20MAR91:04:53	49.50	91.17	-	0	-0.4	-2.7	-2.1	0.3	0.4	0.8	1.2	2.9	1.1	2.52	-0.57	-1.3	0.8	0.22	-0.4	0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:04:54	52.00	91.17	-	0	-0.2	-2.3	-2.0	0.4	0.5	0.9	1.4	2.9	1.0	2.43	-0.67	-1.2	1.0	0.11	-0.3	0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:04:56	54.50	91.17	-	0	-0.4	-2.7	-2.3	-0.1	0.2	0.4	0.9	2.7	1.0	2.43	-0.65	-1.2	0.9	0.05	-0.2	-0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:04:57	57.00	91.17	-	0	-3.4	-5.5	-4.8	-2.9	-2.7	-2.4	-1.9	2.4	0.9	2.35	-0.64	-1.1	0.8	0.12	-0.4	-0.1	0.0	0.0	0.1	0.3	
APC	20MAR91:04:59	59.50	91.17	-	0	-3.5	-5.5	-5.2	-2.9	-2.7	-2.5	-2.0	2.7	0.9	2.45	-0.75	-0.9	0.8	0.11	-0.1	0.0	0.0	0.0	0.1	0.2	
APC	20MAR91:05:01	62.00	91.17	-	0	-3.5	-5.6	-5.2	-2.9	-2.7	-2.5	-1.9	2.7	1.0	2.38	-0.73	-1.0	0.9	0.09	-0.1	-0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:05:02	64.50	91.17	-	0	-4.2	-6.6	-6.2	-3.6	-3.4	-3.1	-2.6	3.0	1.0	2.52	-0.78	-0.9	0.8	0.21	-0.2	-0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:05:04	67.00	91.17	-	0	-3.1	-5.5	-5.1	-2.6	-2.3	-2.1	-1.6	3.0	1.0	2.53	-0.76	-0.9	0.9	0.13	-0.2	-0.0	0.0	0.0	0.1	0.3	
APC	20MAR91:05:06	69.50	91.17	-	0	-3.4	-5.8	-5.2	-2.7	-2.5	-2.1	-1.7	3.1	1.1	2.61	-0.70	-1.0	0.9	0.11	-0.1	0.0	0.0	0.0	0.1	0.4	
APC	20MAR91:05:07	72.00	91.17	-	0	-0.2	-2.5	-1.8	0.4	0.7	1.0	1.3	2.8	1.1	2.51	-0.44	-1.5	1.0	0.05	-0.1	0.0	0.0	0.0	0.1	0.4	
APC	20MAR91:05:09	74.50	91.17	-	0	-0.2	-2.5	-2.0	0.4	0.6	0.9	1.2	2.9	1.1	2.40	-0.55	-1.3	1.0	0.07	-0.1	0.0	0.0	0.0	0.1	0.4	
APC	20MAR91:05:10	77.00	91.17	-	0	-1.8	-4.0	-3.6	-1.0	-0.8	-0.5	-0.1	3.0	1.2	2.50	-0.54	-1.4	1.1	0.03	-0.2	0.0	0.0	0.0	0.0	0.1	0.4
APC	20MAR91:05:12	79.50	91.17	-	0	-0.1	-2.5	-1.8	0.6	0.7	1.1	1.8	3.0	1.2	2.53	-0.49	-1.4	1.2	0.00	-0.2	0.0	0.0	0.0	0.0	0.1	0.4
APC	20MAR91:05:14	82.00	91.17	-	0	0.2	-2.3	-1.4	0.8	1.0	1.4	1.8	2.8	1.0	2.57	-0.53	-1.3	1.0	0.06	-0.2	0.0	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:05:15	84.50	91.17	-	0	-1.0	-3.5	-2.8	-0.4	0.1	0.3	0.7	3.2	1.2	2.71	-0.57	-1.2	1.2	0.04	-0.3	0.0	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:05:17	87.00	91.17	-	0	-0.4	-2.8	-2.3	0.1	0.6	1.1	1.6	3.3	1.2	2.74	-0.47	-1.2	1.2	0.04	-0.3	0.0	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:05:19	89.50	91.17	-	0	0.5	-1.2	-0.5	0.4	0.3	1.9	2.3	2.5	0.8	2.46	-0.50	-0.9	0.9	-0.15	-0.1	0.0	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:06:45	37.00	91.17	121.57	3	2.2	0.5	1.6	2.2	1.8	2.8	3.1	1.2	0.3	1.89	0.01	-0.9	0.3	0.11	-0.1	-0.0	0.0	0.0	0.0	0.1	0.1
APC	20MAR91:06:47	39.50	91.17	123.49	3	1.4	0.2	0.9	1.4	1.6	1.9	2.3	1.1	0.3	1.79	0.01	-0.9	0.3	0.11	-0.1	-0.0	0.0	0.0	0.0	0.1	0.1
APC	20MAR91:06:49	42.00	91.17	125.43	3	2.0	0.5	1.5	2.0	1.8	2.5	2.9	1.0	0.3	1.82	-0.09	-0.3	0.3	-0.05	-0.2	-0.1	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:06:51	44.50	91.17	127.74	3	2.1	1.3	1.8	2.2	2.3	2.6	4.4	0.9	0.3	1.75	0.67	2.7	0.2	0.14	-0.1	-0.0	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:06:54	47.00	91.17	129.84	3	0.4	-1.5	-0.1	0.4	0.2	1.0	3.3	1.1	0.3	1.94	0.82	5.7	0.4	-0.04	-0.2	-0.1	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:06:56	49.50	91.17	131.91	3	2.9	1.6	2.5	3.0	3.1	3.4	3.9	1.0	0.3	1.82	-0.11	-0.4	0.3	0.17	-0.2	-0.0	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:06:58	52.00	91.17	133.80	3	1.6	0.6	1.2	1.6	1.6	2.1	2.6	1.0	0.3	1.79	-0.02	-0.1	0.2	0.24	-0.1	-0.1	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:07:01	54.50	91.17	135.85	4	3.3	2.2	2.7	3.3	3.3	5.0	4.6	1.3	0.4	2.04	0.02	-0.0	0.3	0.13	-0.2	-0.1	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:07:03	57.00	91.17	137.88	4	2.0	1.0	1.5	2.1	1.9	2.6	3.2	1.1	0.5	1.95	-0.18	-0.0	0.3	0.04	-0.2	-0.1	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:07:05	59.50	91.17	139.70	4	2.6	1.1	1.9	2.7	3.2	3.8	4.1	1.2	0.4	2.01	-0.67	1.0	0.3	0.20	-0.2	-0.1	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:07:07	62.00	91.17	141.68	4	2.9	1.7	2.4	2.9	2.9	3.5	4.1	1.2	0.3	1.92	-0.25	0.8	0.3	0.18	-0.2	-0.1	0.0	0.0	0.0	0.1	0.2
APC	20MAR91:07:10	64.50	91.17	143.64	4	-0.5	-1.7	-1.0	-0.5	-0.8	0.1	4.1	1.2	0.5	2.05	3.19	20.3	0.3	0.35	-0.3	0.0	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:07:12	67.00	91.17	145.57	4	4.6	3.2	4.0	4.5	4.4	5.3	10.8	1.2	0.7	2.06	4.70	30.8	0.2	0.64	-0.4	0.0	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:07:14	69.50	91.17	147.23	4	3.5	2.1	2.8	3.4	3.3	4.1	10.7	1.3	0.9	2.15	4.84	27.2	0.3	0.71	-0.4	0.0	0.0	0.0	0.0	0.1	0.3
APC	20MAR91:07:16	72.00	91.17	149.07	4	4.9	3.3	4.0	4.8	4.5	6.4	13.5	2.5	1.2	2.40	4.13	19.2	0.4	0.71	-0.3	-0.1	0.0	0.0	0.0	0.1	0.4

(JMS) 21-01M : ONTARIO

		UNIFORM : MID-IR (SIR)																							
FILE	TIME	ALZIMIN (degrees)	ELEVATION (degrees)	ROLL (degrees)	BOA	HEAR	MINI-MAX (deg.)	MINI-MAX (deg.)	MID-MAX (deg.)	MID-MAX (deg.)	MID-MAX (deg.)	MID-MAX (deg.)	MID-MAX (deg.)	MID-MAX (deg.)	MID-MAX (deg.)	ENTROPY (information loss)	REYNOLDS (information loss)	RUMLOUIS (information loss)	CLUSTERIN (information loss)	REYNOLDS (information loss)	CAT_05 (deg.)	CAT_25 (deg.)	CAT_50 (deg.)	CAT_75 (deg.)	CAT_95 (deg.)
APC	2004091:14:43	39.50	91.17	37.79	1	19.6	12.0	18.2	19.7	19.6	21.1	23.3	2.8	0.9	2.06	0.12	1.8	0.8	6.11	-0.5	-0.2	0.1	0.3	0.7	
APC	2004091:14:44	42.00	91.17	36.99	1	19.5	12.2	18.0	19.7	19.8	21.0	23.7	2.9	0.9	2.09	-0.55	3.2	1.0	-0.08	-0.8	-0.2	0.1	0.3	0.8	
APC	2004091:14:49	44.50	91.17	36.25	1	19.6	13.2	18.2	19.7	19.5	21.0	26.8	2.7	1.1	2.81	-1.61	1.0	-1.2	-0.3	9.0	0.3	1.2	0.4	0.8	
APC	2004091:14:52	47.00	91.17	35.56	1	19.8	15.5	18.6	19.8	19.5	21.6	30.8	3.0	1.1	2.92	2.33	13.4	1.3	-0.20	-0.8	-0.3	0.1	0.4	0.8	
APC	2004091:14:58	52.00	91.17	36.23	1	19.5	12.8	18.4	19.7	19.7	20.8	25.0	2.4	1.8	2.67	-2.27	11.8	0.7	0.24	-0.5	-0.1	0.1	0.3	0.6	
APC	2004091:15:01	54.50	91.17	33.73	1	21.0	12.2	17.8	21.2	20.5	22.8	24.5	4.9	1.4	3.05	-1.75	4.7	1.4	-0.00	-1.2	-0.2	0.0	0.3	1.6	
APC	2004091:15:04	57.00	91.17	33.31	1	20.8	12.2	18.0	21.0	20.5	22.4	24.6	4.4	1.4	3.04	-1.82	5.0	1.4	-0.00	-0.9	-0.2	0.0	0.3	1.2	
APC	2004091:15:07	59.50	91.17	32.97	1	16.8	5.5	13.8	17.0	16.8	18.1	28.8	4.3	1.4	2.06	-1.14	12.0	1.5	-0.06	-0.8	-0.1	0.1	0.3	0.9	
APC	2004091:15:10	62.00	91.17	32.72	1	20.9	12.8	17.7	21.2	21.0	22.4	23.9	4.7	1.3	2.83	-2.33	6.9	1.3	-0.03	-0.9	-0.1	0.1	0.2	0.9	
APC	2004091:15:14	64.50	91.17	32.56	1	17.6	8.6	16.1	17.9	17.6	19.0	19.9	4.9	1.4	2.95	-2.24	5.8	1.4	0.01	-0.6	-0.1	0.1	0.2	0.5	
APC	2004091:15:17	67.50	91.17	32.50	1	21.5	12.1	17.4	21.9	21.8	22.8	23.7	5.1	1.4	2.94	-2.39	5.8	1.4	0.01	-0.4	-0.1	0.0	0.3	0.7	
APC	2004091:15:20	69.50	91.17	32.55	1	18.4	10.0	16.8	18.8	18.8	19.6	20.7	4.8	1.3	2.87	-2.80	6.2	1.3	-0.00	-0.6	-0.1	0.1	0.2	0.6	
APC	2004091:15:23	72.00	91.17	32.70	1	18.6	8.8	13.7	18.7	18.6	20.6	34.0	6.9	2.4	3.00	-2.29	16.1	1.6	0.32	-0.8	-0.1	0.1	0.4	0.9	
APC	2004091:15:26	74.50	91.17	32.95	1	18.0	8.8	13.6	18.5	18.5	20.8	21.8	6.4	1.6	2.95	-1.97	5.2	1.4	0.05	-0.5	-0.2	0.1	0.3	0.7	
APC	2004091:15:29	77.00	91.17	33.05	1	14.8	8.5	13.5	15.8	14.8	15.7	16.5	3.4	0.8	2.24	-2.30	5.7	0.8	-0.01	-0.2	0.0	0.1	0.1	0.4	
APC	2004091:15:32	79.50	91.17	33.51	1	17.4	8.7	12.3	18.0	18.0	19.0	21.2	6.7	1.7	2.91	-2.15	4.3	1.7	-0.01	-0.5	-0.1	0.1	0.2	0.8	
APC	2004091:15:35	82.00	91.17	34.06	1	17.8	3.6	15.0	16.8	16.5	21.6	27.6	6.6	1.9	3.28	-1.61	5.5	1.5	0.24	-0.8	-0.3	0.0	0.3	1.8	
APC	2004091:15:38	84.50	91.17	34.70	1	19.6	12.0	16.0	19.7	19.1	23.9	25.2	9.9	2.6	3.44	-0.56	1.3	2.5	-0.07	-1.0	-0.4	0.1	0.6	1.5	
APC	2004091:15:41	87.00	91.17	35.45	1	14.9	4.4	10.4	15.5	15.5	16.2	16.9	5.8	1.6	2.79	-2.06	3.2	1.7	-0.04	-0.5	-0.1	0.1	0.2	0.7	
APC	2004091:15:45	89.50	91.17	36.28	1	17.9	9.1	14.9	18.0	18.3	19.0	20.4	2.1	0.9	2.67	-2.32	10.5	1.0	-0.14	-0.3	-0.1	0.1	0.1	0.4	
APC	2004091:16:39	37.00	91.17	39.94	1	17.4	14.9	16.6	17.4	17.4	18.4	28.0	1.7	0.6	2.40	-0.50	0.7	0.5	0.66	-0.3	-0.1	0.0	0.2	0.4	
APC	2004091:16:42	39.50	91.17	39.07	1	15.6	10.2	14.9	15.6	15.6	16.5	22.7	1.6	0.6	2.32	-0.12	19.8	0.5	0.17	-0.4	-0.1	0.1	0.3	0.6	
APC	2004091:16:44	42.00	91.17	36.20	1	13.4	3.6	12.6	13.4	13.1	14.6	19.1	2.0	0.6	2.54	-0.12	10.9	0.6	0.16	-0.2	-0.1	0.1	0.2	0.4	
APC	2004091:16:50	44.50	91.17	36.31	1	12.4	5.2	11.2	12.3	11.9	14.1	16.4	2.9	0.9	2.85	-0.58	1.7	0.8	0.09	-0.4	-0.1	0.0	0.2	0.6	
APC	2004091:16:54	47.00	91.17	32.40	1	12.4	10.4	11.0	12.4	12.3	13.9	24.6	2.9	1.0	2.86	-0.62	19.4	1.2	-0.16	-0.4	-0.1	0.0	0.2	0.5	
APC	2004091:16:58	49.50	91.17	30.40	1	14.3	7.4	13.1	14.4	14.3	15.8	20.3	2.7	0.8	2.74	-0.35	3.6	0.6	0.26	-0.4	-0.1	0.1	0.3	0.6	
APC	2004091:17:02	52.00	91.17	28.56	1	13.5	10.8	12.4	13.6	13.8	14.6	16.1	2.2	0.6	2.55	-0.20	0.2	0.5	0.23	-0.3	-0.1	0.0	0.1	0.4	
APC	2004091:17:06	54.50	91.17	26.62	1	9.1	6.8	7.7	9.3	9.4	10.0	11.0	2.3	0.7	2.58	-0.67	-0.1	0.6	0.11	-0.4	-0.1	0.0	0.1	0.6	
APC	2004091:17:10	57.00	91.17	24.67	1	9.2	6.8	8.1	9.4	9.6	10.3	11.6	2.2	0.7	2.64	-0.43	0.3	0.6	0.09	-0.4	-0.1	0.0	0.1	0.6	
APC	2004091:17:14	59.50	91.17	22.72	1	10.7	5.6	9.3	10.9	11.3	12.0	17.5	2.8	0.9	2.83	-0.03	4.3	0.8	0.03	-0.5	-0.1	0.1	0.2	0.6	
APC	2004091:17:18	62.00	91.17	20.76	1	10.0	7.1	8.0	10.1	10.2	11.0	11.9	2.2	0.7	2.63	-0.92	1.6	0.7	-0.00	-0.6	-0.1	0.0	0.1	0.4	
APC	2004091:17:22	64.50	91.17	18.73	1	9.8	6.5	8.0	9.1	9.5	10.2	11.3	2.2	0.7	2.66	-0.52	0.8	0.7	0.10	-0.3	-0.1	0.0	0.1	0.4	
APC	2004091:17:26	67.00	91.17	16.77	1	9.8	6.8	8.5	9.8	9.4	11.1	12.2	2.7	0.8	2.78	-0.50	0.8	0.8	0.04	-0.4	-0.1	0.0	0.1	0.5	
APC	2004091:17:30	69.50	91.17	16.79	1	9.5	7.0	8.4	9.5	9.4	10.7	11.8	2.3	0.8	2.72	-0.15	-0.2	0.7	0.02	-0.3	-0.1	0.0	0.1	0.4	
APC	2004091:17:34	72.00	91.17	12.81	1	19.7	17.0	18.3	19.7	20.4	21.1	27.9	2.9	1.4	2.97	-2.55	11.0	1.0	0.24	-0.6	-0.2	0.1	0.2	0.9	
APC	2004091:17:38	74.50	91.17	10.84	1	8.1	6.2	6.8	8.3	8.7	9.3	12.2	2.5	0.8	2.72	-0.09	-0.4	0.8	0.00	-0.4	-0.1	0.0	0.2	0.4	
APC	2004091:17:42	77.00	91.17	8.86	1	7.2	3.0	6.1	7.4	7.8	8.4	10.3	2.3	0.7	2.63	-0.25	-0.4	0.7	-0.02	-0.2	0.0	0.1	0.2	0.4	

(IRS) 81-616 - 0075444

Appendix D Image Metrics Data

UNVEILED : MID-IR (SIX)

SITE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	BDN (Degrees)	MAX (Degrees)	MINIMUM (Degrees)	PARC (Degrees)	MEAN (Degrees)	MODE (Degrees)	PEAK (Degrees)	MAXIMUM (Degrees)	RND (Degrees)	DB (Degrees)	ENTROPY (Dimensions)	REVERSE (Dimensions)	TRANSITION (Dimensions)	CUTTER (Dimensions)	RETURNS (Dimensions)	CNT_05 (Degrees)	CNT_25 (Degrees)	CNT_50 (Degrees)	CNT_75 (Degrees)	CNT_95 (Degrees)
FTD	20MAR91:16:09	48.00	90.75	35.98	1	8.2	7.3	7.8	8.2	8.1	8.9	9.8	1.1	0.6	1.98	0.53	0.4	-	-0.2	-0.1	0.0	0.1	0.2
FTD	20MAR91:16:12	42.50	90.75	34.17	1	8.4	7.6	8.0	8.4	8.2	8.9	9.7	0.9	0.3	1.80	0.57	0.7	-	-0.1	0.0	0.1	0.1	0.2
FTD	20MAR91:16:16	65.00	90.75	32.44	1	8.4	7.7	8.1	8.5	8.4	9.1	9.8	1.0	0.3	1.86	0.67	0.8	-	-0.1	0.0	0.1	0.1	0.2
FTD	20MAR91:16:17	47.50	90.75	30.68	1	8.8	7.4	8.2	8.6	8.6	9.5	10.5	1.3	0.4	2.10	0.55	0.7	0.3	0.33	-0.1	-0.1	0.1	0.2
FTD	20MAR91:16:19	50.00	90.75	28.97	1	9.1	8.3	8.7	9.0	8.8	10.0	11.2	1.3	0.4	1.99	1.26	1.9	0.2	0.47	-0.1	0.0	0.1	0.2
FTD	20MAR91:17:42	17.50	90.75	69.20	2	7.6	7.1	7.2	7.5	7.4	8.0	8.2	0.7	8.2	1.55	0.61	-0.8	-	-0.2	-0.1	0.0	0.1	0.1
FTD	20MAR91:17:44	20.00	90.75	67.22	2	7.8	7.4	7.6	7.8	7.7	8.2	8.5	0.7	0.2	1.46	0.65	-0.9	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:17:47	22.50	90.75	65.07	2	8.1	7.7	7.9	8.1	8.0	8.4	8.7	0.5	0.2	1.29	0.61	-0.4	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:17:49	25.00	90.75	63.09	2	7.4	7.2	7.4	7.6	7.5	8.0	8.2	0.6	0.2	1.39	0.18	-0.9	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:17:52	27.50	90.75	60.94	2	7.4	7.0	7.2	7.4	7.3	7.7	8.0	0.6	0.2	1.30	0.62	-0.0	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:17:54	30.00	90.75	58.95	2	7.8	7.4	7.5	7.8	7.7	8.1	8.5	0.6	0.2	1.35	0.25	-0.4	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:17:57	32.50	90.75	56.80	2	8.2	7.7	7.9	8.2	8.1	8.5	8.8	0.5	0.2	1.30	0.33	0.0	-	-0.1	0.0	0.0	0.0	0.1
FTD	20MAR91:17:59	35.00	90.75	54.81	2	8.2	7.8	7.9	8.2	8.2	8.4	8.6	0.5	0.2	1.19	0.65	-0.7	-	-0.1	0.0	0.0	0.0	0.1
FTD	20MAR91:18:04	40.00	90.75	52.66	2	8.1	7.8	7.9	8.2	8.2	8.4	8.8	0.5	0.2	1.18	0.51	0.3	-	-0.0	0.0	0.0	0.0	0.1
FTD	20MAR91:18:06	42.50	90.75	50.67	2	7.8	7.4	7.6	7.8	7.7	8.0	8.4	0.4	0.1	1.05	0.49	0.5	-	-0.1	0.0	0.0	0.0	0.1
FTD	20MAR91:18:07	45.00	90.75	48.52	2	7.8	7.4	7.6	7.8	7.8	8.0	8.4	0.4	0.1	1.08	0.36	0.0	-	-0.0	0.0	0.0	0.0	0.1
FTD	20MAR91:18:09	47.50	90.75	46.53	2	7.8	7.4	7.6	7.8	7.8	8.1	8.4	0.4	0.1	1.08	0.36	0.0	-	-0.0	0.0	0.0	0.0	0.1
FTD	20MAR91:18:12	47.50	90.75	44.39	1	7.7	7.3	7.5	7.8	7.8	8.0	8.4	0.5	0.2	1.27	0.12	-0.0	0.1	0.27	-0.1	-0.0	0.0	0.1
FTD	20MAR91:18:15	50.00	90.75	42.41	1	7.8	7.2	7.6	7.8	7.8	8.1	8.7	0.5	0.2	1.16	0.67	1.4	0.1	0.14	-0.0	0.0	0.0	0.1
FTD	20MAR91:19:45	17.50	90.75	-	0	4.0	3.4	3.7	4.0	3.8	4.3	5.0	0.8	0.3	1.63	0.75	0.1	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:19:48	20.00	90.75	-	0	4.4	3.8	4.1	4.4	4.2	4.9	5.6	0.8	0.2	1.56	0.80	0.4	-	-0.1	-0.1	0.0	0.0	0.1
FTD	20MAR91:19:52	22.50	90.75	-	0	3.7	3.2	3.5	3.7	3.6	4.1	4.6	0.6	0.2	1.39	0.73	0.4	-	-0.1	-0.0	0.0	0.0	0.1
FTD	20MAR91:19:55	25.00	90.75	-	0	4.5	4.0	4.3	4.5	4.4	4.9	5.4	0.6	0.2	1.42	0.70	0.5	-	-0.1	-0.0	0.0	0.0	0.1
FTD	20MAR91:20:03	30.00	90.75	-	0	4.9	4.5	4.7	4.9	4.9	5.3	5.9	0.6	0.2	1.32	1.10	2.0	-	-0.0	-0.0	0.0	0.0	0.1
FTD	20MAR91:20:06	32.50	90.75	-	0	8.4	7.8	8.1	8.4	8.5	8.8	9.3	0.7	0.2	1.53	0.36	0.0	-	-0.1	-0.0	0.0	0.0	0.1
FTD	20MAR91:20:10	35.00	90.75	-	0	4.8	4.3	4.5	4.8	4.7	5.2	5.8	0.7	0.2	1.50	0.86	0.8	-	-0.0	0.0	0.0	0.0	0.1
FTD	20MAR91:20:13	37.50	90.75	-	0	4.7	4.2	4.4	4.8	4.8	5.1	5.5	0.7	0.2	1.54	0.16	-0.4	-	-0.1	-0.0	0.0	0.0	0.1
FTD	20MAR91:20:17	40.00	90.75	-	0	4.9	4.4	4.6	4.9	4.9	5.4	5.9	0.8	0.2	1.55	0.52	0.7	-	-0.0	0.0	0.0	0.0	0.1
FTD	20MAR91:20:21	42.50	90.75	-	0	4.0	3.4	3.7	4.0	4.0	4.4	5.0	0.7	0.2	1.54	0.32	0.6	-	-0.1	-0.0	0.0	0.0	0.1
FTD	20MAR91:20:26	45.00	90.75	-	0	4.5	4.0	4.2	4.5	4.4	4.8	5.5	0.6	0.2	1.62	0.75	1.0	-	-0.0	0.0	0.0	0.0	0.1
FTD	20MAR91:20:28	47.50	90.75	-	0	4.6	4.2	4.3	4.7	4.6	5.1	5.7	0.8	0.2	1.55	0.60	0.3	0.2	0.26	-0.1	0.0	0.0	0.1
FTD	20MAR91:21:31	50.00	90.75	-	0	6.4	5.9	6.2	6.4	6.3	6.8	7.3	0.6	0.2	1.35	0.80	1.5	0.1	0.24	-0.0	0.0	0.0	0.1
FTD	20MAR91:21:49	17.50	90.75	-	0	4.9	4.6	4.7	4.9	4.8	5.1	5.4	0.4	0.1	0.97	0.55	-0.3	-	-0.1	-0.0	0.0	0.0	0.0
FTD	20MAR91:21:52	20.00	90.75	-	0	5.5	5.2	5.3	5.5	5.4	5.7	6.0	0.4	0.1	1.08	0.49	-0.2	-	-0.1	-0.0	0.0	0.0	0.0
FTD	20MAR91:21:55	22.50	90.75	-	0	5.8	5.6	5.7	5.9	5.8	6.1	6.3	0.4	0.1	0.89	0.51	0.1	-	-0.0	-0.0	0.0	0.0	0.0
FTD	20MAR91:21:57	25.00	90.75	-	0	5.9	5.6	5.8	5.9	5.8	6.2	6.4	0.4	0.1	1.08	0.57	-0.3	-	-0.0	-0.0	0.0	0.0	0.0

SITE		TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BIDN (Degrees)	BOA	HEAR (Deg. C)	MINIMUM (Deg. C)	PERC. 05 (Deg. C)	PERC. 05 (Deg. C)	MEDIAN (Deg. C)	MODE (Deg. C)	PERC. 95 (Deg. C)	MAXIMUM (Deg. C)	RNC. 20 (Deg. C)	30 (Deg. C)	ENTROPY (Dimensionless)	SKEWNESS (Dimensionless)	KURTOSIS (Dimensionless)	CLUSTER (Deg. C)	REYNOLDS (Dimensionless)	CNT. 05 (Deg. C)	CNT. 25 (Deg. C)	CNT. 50 (Deg. C)	CNT. 75 (Deg. C)	CNT. 95 (Deg. C)
FTD	26MAR91:22:00	27.50	90.75			0	5.6	5.3	5.5	5.6	5.6	5.6	5.8	6.2	0.4	0.1	0.97	0.71	0.9	-	-	-0.0	-0.0	0.0	0.0	0.1
FTD	26MAR91:22:02	30.00	90.75			0	5.6	5.3	5.4	5.5	5.5	5.5	5.8	6.1	0.4	0.1	1.00	0.70	0.5	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:22:05	32.50	90.75			0	5.6	5.4	5.5	5.6	5.6	5.6	5.9	6.1	0.4	0.1	0.87	0.90	0.6	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:22:07	35.00	90.75			0	5.7	5.4	5.5	5.7	5.6	5.7	5.9	6.1	0.3	0.1	0.84	0.37	-0.1	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:22:10	37.50	90.75			0	5.7	5.4	5.5	5.7	5.7	5.7	5.9	6.2	0.4	0.1	1.04	0.47	0.2	-	-	-0.0	0.0	0.0	0.0	0.0
FTD	26MAR91:22:12	40.00	90.75			0	5.7	5.5	5.6	5.7	5.7	5.7	5.9	6.2	0.3	0.1	0.87	0.88	1.2	-	-	-0.0	0.0	0.0	0.0	0.0
FTD	26MAR91:22:15	42.50	90.75			0	5.7	5.5	5.6	5.7	5.7	5.7	5.9	6.2	0.3	0.1	0.80	0.70	1.2	-	-	-0.0	0.0	0.0	0.0	0.0
FTD	26MAR91:22:17	45.00	90.75			0	5.6	5.4	5.5	5.6	5.6	5.6	5.8	6.2	0.4	0.1	0.87	0.70	0.7	-	-	0.0	0.0	0.0	0.0	0.0
FTD	26MAR91:22:20	47.50	90.75			0	6.3	6.0	6.1	6.3	6.3	6.3	6.5	6.9	0.4	0.1	1.08	0.25	0.2	0.1	0.25	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:22:22	50.00	90.75			0	6.3	6.0	6.2	6.3	6.3	6.3	6.5	6.8	0.3	0.1	0.87	0.73	1.2	0.1	0.25	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:23:46	17.50	90.75			0	5.6	5.2	5.4	5.6	5.5	5.5	5.9	6.2	0.5	0.1	1.19	0.47	-0.3	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:23:49	20.00	90.75			0	5.2	4.9	5.0	5.2	5.1	5.5	5.9	6.5	0.1	1.19	0.70	0.1	-	-	-	-0.0	-0.0	0.0	0.0	0.1
FTD	26MAR91:23:52	22.50	90.75			0	5.6	5.1	5.4	5.6	5.5	5.9	6.2	0.5	0.1	1.18	0.33	0.2	-	-	-	-0.0	-0.0	0.0	0.0	0.1
FTD	26MAR91:23:56	25.00	90.75			0	5.6	5.3	5.4	5.6	5.5	5.9	6.1	0.5	0.1	1.12	0.50	-0.5	-	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:23:57	27.50	90.75			0	5.7	5.5	5.6	5.7	5.7	6.0	6.3	0.4	0.1	0.99	0.95	1.1	-	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	26MAR91:23:59	30.00	90.75			0	5.8	5.5	5.6	5.8	5.7	6.0	6.4	0.4	0.1	1.08	0.49	-0.0	-	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	27MAR91:00:02	32.50	90.75			0	6.1	5.7	5.9	6.1	6.0	6.4	6.7	0.5	0.1	1.23	0.44	0.2	-	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	27MAR91:00:04	35.00	90.75			0	6.2	5.9	6.0	6.2	6.2	6.5	6.8	0.4	0.1	1.09	0.18	-0.4	-	-	-	-0.0	-0.0	0.0	0.0	0.0
FTD	27MAR91:00:07	37.50	90.75			0	5.6	5.3	5.4	5.6	5.5	5.8	6.1	0.4	0.1	1.06	0.58	0.1	-	-	-	-0.0	0.0	0.0	0.0	0.0
FTD	27MAR91:00:09	40.00	90.75			0	5.5	5.2	5.4	5.5	5.5	5.8	6.0	0.4	0.1	1.01	0.70	0.6	-	-	-	-0.0	0.0	0.0	0.0	0.0
FTD	27MAR91:00:12	42.50	90.75			0	5.6	5.2	5.4	5.6	5.5	5.8	6.2	0.4	0.1	1.02	0.58	0.7	-	-	-	-0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:00:14	45.00	90.75			0	5.7	5.2	5.4	5.7	5.7	5.9	6.2	0.5	0.2	1.21	-0.06	-0.1	-	-	-	-0.3	0.0	0.0	0.0	0.1
FTD	27MAR91:00:17	47.50	90.75			0	6.0	5.7	5.9	6.0	6.0	6.3	6.7	0.5	0.1	1.16	0.51	0.3	0.1	0.33	-0.0	-0.0	0.0	0.0	0.0	0.0
FTD	27MAR91:00:19	50.00	90.75			0	5.2	4.8	5.0	5.2	5.1	5.4	5.7	0.4	0.1	1.94	0.56	0.6	0.1	0.25	-0.0	-0.0	0.0	0.0	0.0	0.0
FTD	27MAR91:01:51	17.50	90.75			0	6.9	6.5	6.7	6.9	6.8	7.4	7.9	0.8	0.2	1.57	0.76	-0.1	-	-	-	-0.1	-0.1	0.0	0.0	0.1
FTD	27MAR91:01:53	20.00	90.75			0	6.9	6.5	6.7	6.9	6.8	7.4	7.8	0.8	0.2	1.56	0.69	-0.2	-	-	-	-0.1	-0.1	0.0	0.0	0.1
FTD	27MAR91:01:56	22.50	90.75			0	5.5	5.1	5.3	5.5	5.4	5.8	6.3	0.6	0.2	1.30	0.82	0.6	-	-	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:01:58	25.00	90.75			0	5.5	5.0	5.2	5.5	5.4	5.9	6.2	0.6	0.2	1.42	0.43	-0.2	-	-	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:02:01	27.50	90.75			0	5.5	5.1	5.3	5.5	5.4	5.9	6.4	0.6	0.2	1.33	0.98	0.9	-	-	-	-0.1	-0.1	-0.0	0.0	0.1
FTD	27MAR91:02:04	30.00	90.75			0	5.6	5.1	5.3	5.6	5.4	6.0	6.3	0.6	0.2	1.41	0.54	-0.1	-	-	-	-0.1	-0.1	0.0	0.0	0.1
FTD	27MAR91:02:06	32.50	90.75			0	5.9	5.5	5.7	5.9	5.8	6.3	6.7	0.6	0.2	1.34	0.67	0.1	-	-	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:02:09	35.00	90.75			0	6.0	5.6	5.8	6.0	6.0	6.3	6.5	0.5	0.2	1.30	0.02	-0.8	-	-	-	-0.1	-0.0	0.0	0.0	0.1
FTD	27MAR91:02:11	37.50	90.75			0	7.5	7.0	7.3	7.6	7.4	7.9	8.4	0.7	0.2	1.46	0.42	0.1	-	-	-	-0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:02:14	40.00	90.75			0	7.5	7.1	7.3	7.6	7.4	7.7	8.2	0.4	0.1	1.08	0.84	1.0	-	-	-	-0.3	0.0	0.0	0.0	0.1
FTD	27MAR91:02:17	42.50	90.75			0	6.0	5.7	5.9	6.1	6.0	6.3	6.8	0.4	0.1	1.14	0.87	1.4	-	-	-	-0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:02:19	45.00	90.75			0	6.0	5.7	5.8	6.1	6.0	6.3	6.7	0.5	0.1	1.17	0.66	1.0	-	-	-	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:02:22	47.50	90.75			0	6.2	5.8	6.0	6.2	6.1	6.5	6.9	0.5	0.2	1.20	0.69	0.4	0.1	0.26	-0.0	-0.0	0.0	0.0	0.0	0.1

WAVEBAND : MID-IR(SNR)

SITE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	RDR (Degrees)	MOA	MEAN (Deg.)	MINIMUM (Deg.)	PERCENT (Deg.)	MEDIAN (Deg.)	MODE (Deg.)	PERCENT (Deg.)	MAXIMUM (Deg.)	RNG. 90 (Deg.)	SD (Deg.)	RTNDRY (inches)	STRESS (inches)	RTNDRSIS (inches)	CLUTTER (Deg.)	RTNDRSIS (inches)	CUT. 05 (Deg.)	CUT. 25 (Deg.)	CUT. 50 (Deg.)	CUT. 75 (Deg.)	CUT. 95 (Deg.)	
FTD	27MAR91:02:25	50.00	90.75	-	0	4.2	5.9	4.1	6.2	6.2	6.5	6.9	0.4	0.1	1.10	0.86	1.1	0.1	-0.0	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:03:45	17.50	90.75	-	0	6.3	5.8	6.0	6.2	6.1	6.8	7.1	0.8	0.3	1.58	0.49	-0.9	-	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:03:47	20.00	90.75	-	0	6.8	6.3	6.5	6.7	6.6	7.2	7.5	0.7	0.2	1.51	0.48	-0.9	-	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:50	22.50	90.75	-	0	6.8	6.5	6.6	6.8	6.7	7.1	7.4	0.5	0.2	1.20	0.46	-0.3	-	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:53	25.00	90.75	-	0	6.9	6.2	6.7	7.0	6.9	7.2	7.5	0.5	0.2	1.24	-0.24	0.5	-	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:56	27.50	90.75	-	0	6.1	5.8	6.0	6.1	6.1	6.6	6.7	0.4	0.1	1.04	0.61	0.3	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:59	30.00	90.75	-	0	6.2	5.7	6.0	6.2	6.2	6.5	6.8	0.5	0.2	1.25	-0.07	-0.6	-	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:02	32.50	90.75	-	0	7.3	6.8	7.1	7.3	7.3	7.5	7.8	0.4	0.1	1.00	0.52	0.4	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:04	35.00	90.75	-	0	7.3	6.8	7.1	7.4	7.3	7.6	7.9	0.5	0.2	1.26	0.01	-0.0	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:07	37.50	90.75	-	0	6.6	6.1	6.2	6.4	6.3	6.6	6.9	0.4	0.1	1.08	0.56	0.2	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:10	40.00	90.75	-	0	6.5	6.2	6.3	6.5	6.4	6.7	7.1	0.4	0.1	0.96	0.75	0.8	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:13	42.50	90.75	-	0	7.4	7.1	7.3	7.4	7.4	7.7	8.0	0.4	0.1	0.97	0.63	0.6	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:16	45.00	90.75	-	0	7.4	7.1	7.3	7.5	7.4	7.7	8.1	0.4	0.1	0.99	0.62	0.9	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:19	47.50	90.75	-	0	7.1	6.8	6.9	7.1	7.0	7.3	7.7	0.4	0.1	1.05	0.67	0.6	0.1	0.33	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:22	50.00	90.75	-	0	7.8	6.6	6.8	7.0	6.9	7.2	7.6	0.4	0.1	0.98	0.69	1.0	0.1	0.31	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:49	17.50	90.75	-	0	5.2	4.7	5.0	5.2	5.1	5.6	6.0	0.6	0.2	1.44	0.44	-0.1	-	-0.0	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:52	20.00	90.75	-	0	4.6	4.1	4.4	4.6	4.5	5.0	5.4	0.6	0.2	1.41	0.44	-0.1	-	-0.1	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:55	22.50	90.75	-	0	4.8	4.4	4.6	4.8	4.8	5.1	5.6	0.5	0.2	1.20	0.60	0.3	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:05:57	25.00	90.75	-	0	4.8	4.3	4.5	4.8	4.7	5.2	5.6	0.7	0.2	1.44	0.51	-0.2	-	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:00	27.50	90.75	120.46	3	5.3	4.8	5.1	5.3	5.2	5.7	6.0	0.6	0.2	1.36	0.64	0.6	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
FTD	27MAR91:06:02	30.00	90.75	122.62	3	5.3	4.8	5.1	5.3	5.2	5.7	6.2	0.6	0.2	1.36	0.55	0.4	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:05	32.50	90.75	124.76	3	6.0	5.4	5.7	6.0	5.9	6.4	7.0	0.6	0.2	1.50	0.84	1.0	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:07	35.00	90.75	126.72	3	6.0	5.4	5.7	6.0	6.0	6.4	6.9	0.7	0.2	1.50	0.27	0.2	-	-0.1	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:10	37.50	90.75	128.85	3	5.5	5.1	5.3	5.5	5.4	5.8	6.3	0.6	0.2	1.33	0.52	0.4	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:12	40.00	90.75	130.80	3	5.5	5.1	5.3	5.5	5.4	5.9	6.4	0.6	0.2	1.50	0.68	0.6	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:15	42.50	90.75	132.93	3	4.8	4.3	4.5	4.8	4.8	5.2	5.7	0.6	0.2	1.37	0.52	0.3	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:17	45.00	90.75	134.86	3	4.8	4.3	4.6	4.8	4.7	5.1	5.7	0.6	0.2	1.30	0.67	0.9	-	-0.0	0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:20	47.50	90.75	136.97	4	4.7	3.6	3.8	4.1	3.9	4.5	5.0	0.7	0.2	1.43	0.63	0.4	0.2	0.34	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	27MAR91:06:22	50.00	90.75	138.89	4	4.2	3.7	4.0	4.2	4.1	4.5	5.1	0.6	0.2	1.33	0.81	1.1	0.1	0.34	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	11AUG91:06:52	23.00	90.75	130.45	3	15.3	14.6	14.9	15.4	15.4	15.9	16.4	1.0	0.3	1.82	0.16	0.0	-	-	-0.1	0.0	0.0	0.0	0.0	0.3
FTD	11AUG91:06:59	28.00	90.75	133.96	3	14.0	13.3	13.7	14.1	14.0	14.5	14.8	0.7	0.2	1.57	0.16	-0.0	-	-	-0.1	0.0	0.0	0.0	0.0	0.2
FTD	11AUG91:07:02	30.50	90.75	135.47	4	15.2	14.5	14.9	15.2	15.1	15.7	16.7	0.9	0.3	1.67	1.34	3.6	-	-	-0.1	0.0	0.0	0.0	0.0	0.2
FTD	11AUG91:07:05	33.00	90.75	137.15	4	14.2	13.6	14.0	14.2	14.2	14.6	15.7	0.6	0.2	1.48	1.64	6.9	-	-	-0.1	-0.0	0.0	0.0	0.0	0.2
FTD	11AUG91:07:09	35.50	90.75	138.79	4	14.5	13.5	14.0	14.5	14.5	14.9	16.0	0.8	0.3	1.63	-0.16	1.3	-	-	-0.2	-0.1	0.0	0.0	0.0	0.2
FTD	11AUG91:07:12	38.00	90.75	140.39	4	15.2	14.6	14.9	15.2	15.1	15.7	16.4	0.8	0.2	1.55	0.63	0.9	-	-	-0.0	0.0	0.0	0.0	0.0	0.1
FTD	11AUG91:07:15	40.50	90.75	141.73	4	14.9	14.0	14.3	14.9	15.4	16.3	1.0	0.3	1.82	0.04	1.0	-	-	-0.1	0.0	0.0	0.0	0.0	0.0	0.2
FTD	11AUG91:07:18	43.00	90.75	143.23	4	15.2	14.6	15.0	15.3	15.2	15.7	16.6	0.7	0.2	1.47	0.84	3.1	-	-	-0.1	0.0	0.0	0.0	0.0	0.2

[illegible]

LAYERLAND : MID-IR(SIX)																										
SITE	TIME	ALTIMETER (Degrees)	ELEVATION (Degrees)	BDR (Degrees)	WAVE (Degrees)	MINIMUM (Degrees)	PERCENT (Degrees)	MEAN (Degrees)	MODE (Degrees)	PERCENT (Degrees)	MAXIMUM (Degrees)	WAVE (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)	CLUTTER (Degrees)		
YAC	13SEP90:04:10	162.00	91.33	-	0	28.2	28.7	27.5	28.4	28.6	28.9	30.1	1.5	0.4	2.22	-0.41	-0.3	0.3	0.28	-0.2	0.0	0.1	0.1	0.4	CNT_95 (Cnt_95)	
YAC	13SEP90:04:13	164.50	91.33	-	0	28.2	28.4	27.6	28.4	28.6	28.9	30.2	1.4	0.4	2.25	-0.37	0.1	0.4	0.24	-0.3	0.0	0.1	0.1	0.4	CNT_75 (Cnt_75)	
YAC	13SEP90:04:17	167.00	91.33	-	0	28.5	28.5	27.8	28.6	28.0	29.4	30.8	1.6	0.5	2.31	0.01	-0.5	0.3	0.41	-0.2	0.0	0.1	0.1	0.4	CNT_50 (Cnt_50)	
YAC	13SEP90:04:20	169.50	91.33	-	0	28.4	27.8	27.6	28.5	28.4	29.5	30.3	1.8	0.6	2.42	0.05	-0.4	0.4	0.25	-0.2	-0.1	0.1	0.1	0.4	CNT_25 (Cnt_25)	
YAC	13SEP90:04:24	172.00	91.33	-	0	27.0	25.4	25.9	27.0	27.1	28.1	28.9	2.2	0.7	2.60	-0.01	-0.9	0.4	0.45	-0.2	0.0	0.1	0.1	0.3	CNT_05 (Cnt_05)	
YAC	13SEP90:04:27	190.00	91.33	-	0	27.2	26.8	26.3	27.2	27.1	28.4	28.9	2.0	0.6	2.37	0.53	-0.3	0.5	0.19	-0.1	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:04:31	192.50	91.33	-	0	27.9	26.7	27.1	27.9	27.9	29.1	29.7	2.0	0.6	2.35	0.59	-0.0	0.5	0.12	-0.2	0.0	0.1	0.1	0.3	CLUTTER (Clutter)	
YAC	13SEP90:04:34	195.00	91.33	-	0	27.8	26.7	27.1	27.8	27.7	29.0	29.4	1.9	0.5	2.30	0.70	0.1	0.5	0.10	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:04:45	200.00	91.33	-	0	28.1	26.9	27.4	28.1	27.9	29.0	29.3	1.6	0.4	2.16	0.43	-0.1	0.3	0.27	-0.1	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:04:49	235.33	92.33	-	0	27.9	26.3	27.2	28.1	28.1	28.7	29.8	1.5	0.4	2.18	-0.07	0.2	0.3	0.26	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:05:48	157.00	91.33	-	0	25.7	24.7	25.2	25.8	25.7	26.2	26.8	1.5	0.3	1.80	0.05	0.4	0.2	0.31	-0.1	0.0	0.1	0.1	0.2	REWORKS (Reworks)	
YAC	13SEP90:05:51	159.50	91.33	-	0	25.9	24.5	25.3	25.9	25.8	26.5	27.3	1.2	0.4	2.02	-0.09	0.3	0.3	0.19	-0.2	-0.1	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:05:54	162.00	91.33	-	0	25.7	24.4	25.1	25.7	25.7	26.2	27.3	1.2	0.3	1.96	-0.16	-0.3	0.3	0.22	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:05:57	164.50	91.33	-	0	25.7	24.3	25.0	25.7	25.6	26.3	26.9	1.3	0.4	2.04	-0.20	-0.3	0.3	0.15	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:00	167.00	91.33	-	0	26.8	25.3	26.2	26.9	26.7	27.6	28.0	1.3	0.4	2.11	0.08	-0.5	0.3	0.33	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:03	169.50	91.33	-	0	26.9	25.7	26.1	26.9	26.8	27.6	28.1	1.5	0.5	2.24	-0.03	-0.8	0.3	0.28	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:06	172.00	91.33	-	0	26.1	24.8	25.3	26.2	26.6	26.9	27.4	1.6	0.5	2.29	-0.09	-1.0	0.3	0.40	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:09	190.00	91.33	-	0	26.2	25.1	25.6	26.2	25.9	27.2	27.5	1.6	0.5	2.22	0.30	-1.0	0.3	0.47	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:12	192.50	91.33	-	0	26.1	24.8	25.3	26.1	25.9	27.0	27.6	1.7	0.5	2.29	0.13	-0.7	0.3	0.41	-0.2	0.0	0.1	0.1	0.2	REWORKS (Reworks)	
YAC	13SEP90:06:15	195.00	91.33	-	0	26.2	25.1	25.5	26.2	26.1	27.1	28.2	1.6	0.5	2.22	0.10	-0.6	0.3	0.34	-0.2	-0.1	0.1	0.1	0.2	REWORKS (Reworks)	
YAC	13SEP90:06:18	197.50	91.33	-	0	26.4	25.3	25.8	26.7	26.6	27.4	27.9	1.6	0.5	2.23	-0.16	-0.2	0.3	0.36	-0.2	-0.1	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:21	200.00	91.33	-	0	26.4	25.2	25.7	26.5	26.5	27.1	27.3	1.4	0.4	2.08	-0.41	0.0	0.3	0.27	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:24	202.83	91.33	62.43	2	26.4	25.2	25.7	26.5	26.5	27.1	27.3	1.3	0.4	2.12	-0.27	-0.3	0.3	0.26	-0.2	0.0	0.1	0.1	0.3	REWORKS (Reworks)	
YAC	13SEP90:06:27	235.33	92.33	30.36	1	30.8	30.8	31.2	31.8	31.6	32.6	33.7	1.4	0.5	2.22	0.45	0.3	0.4	0.14	-0.2	-0.0	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:07:49	157.00	91.33	118.06	3	32.0	30.8	31.3	32.0	31.7	32.7	33.3	1.3	0.4	2.14	0.07	-0.6	0.3	0.20	-0.2	-0.0	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:08:00	162.00	91.33	116.21	3	32.1	30.8	31.4	32.1	31.8	32.9	33.7	1.5	0.5	2.26	0.37	-0.3	0.4	0.07	-0.2	-0.0	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:08:04	164.50	91.33	112.57	3	32.4	31.2	31.7	32.5	32.7	33.3	33.9	1.6	0.5	2.29	0.04	-0.8	0.4	0.21	-0.2	-0.0	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:08:10	167.00	91.33	110.79	3	32.7	31.4	32.0	32.7	32.2	33.8	34.6	1.9	0.6	2.41	0.51	-0.3	0.5	0.13	-0.3	-0.0	0.0	0.0	0.1	0.4	REWORKS (Reworks)
YAC	13SEP90:08:15	169.50	91.33	109.03	3	33.4	32.2	32.7	33.6	33.5	34.5	36.6	1.8	0.6	2.41	0.14	-0.7	0.5	0.06	-0.2	-0.1	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:08:19	172.00	91.33	107.30	3	34.0	32.5	33.1	34.1	33.7	35.1	35.8	2.0	0.6	2.53	0.13	-0.7	0.5	0.24	-0.3	-0.1	0.0	0.0	0.2	0.3	REWORKS (Reworks)
YAC	13SEP90:08:25	190.00	91.33	91.68	3	35.0	33.7	34.4	34.9	34.7	36.0	36.6	1.6	0.5	2.12	0.98	0.4	0.3	0.29	-0.3	-0.0	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:08:30	192.50	91.33	90.12	3	35.1	34.1	34.6	35.0	34.9	36.0	36.9	1.4	0.4	2.06	1.02	1.3	0.4	0.12	-0.3	-0.0	0.0	0.0	0.1	0.3	REWORKS (Reworks)
YAC	13SEP90:08:34	195.00	91.33	88.60	2	34.2	33.2	33.7	34.1	34.0	35.2	35.7	1.6	0.5	2.18	0.83	0.2	0.4	0.06	-0.3	-0.1	0.0	0.0	0.2	0.4	REWORKS (Reworks)
YAC	13SEP90:08:40	197.50	91.33	87.11	2	35.0	34.0	34.4	34.9	34.6	36.3	36.4	1.9	0.6	2.37	1.73	4.8	0.5	0.24	-0.4	-0.1	0.0	0.0	0.2	0.6	REWORKS (Reworks)
YAC	13SEP90:08:45	200.00	91.33	85.66	2	35.4	34.0	34.7	35.3	35.0	36.5	36.5	1.8	0.5	2.33	0.80	0.5	0.5	0.06	-0.3	-0.1	0.0	0.0	0.2	0.5	REWORKS (Reworks)

[illegible]

TIME	14SEP00:00:04	235.33	92.33	0	26.1	23.1	23.1	23.8	26.2	26.1	26.5	25.1	0.8	0.2	1.61	-0.26	0.3	0.2	0.17	-0.1	-0.0	0.0	0.0	0.1	0.2
TYPE	1176																								
AZIMUTH	(Degrees)	235.33																							
ELEVATION	(Degrees)	92.33																							
SLDR	(Degrees)																								
BOA		0																							
MEAN	(Deg, C)	26.1																							
MINIMUM	(Deg, C)	23.1																							
PERCENT	(Deg, C)	23.8																							
MEDIAN	(Deg, C)	26.2																							
MODE	(Deg, C)	26.1																							
PERCENT_95	(Deg, C)	26.5																							
MAXIMUM	(Deg, C)	25.1																							
RMSD_90	(Deg, C)	0.8																							
SD	(Deg, C)	0.2																							
ENTROPY	(Differential)	1.61																							
SKELNESS	(Differential)	-0.26																							
KURTOSIS	(Differential)	0.3																							
CLUSTER	(Deg, C)	0.2																							
REYNOLDS	(Differential)	0.17																							
CNT_05	(Deg, C)	-0.1																							
CNT_25	(Deg, C)	-0.0																							
CNT_50	(Deg, C)	0.0																							
CNT_75	(Deg, C)	0.1																							
CNT_95	(Deg, C)	0.2																							

WAVEBAND = WIS-IR(SIX)

UNIVERSITY : VISIBLE									
LINE	TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	COORDINATE (Degrees)	COORDINATE (Degrees)	COORDINATE (Degrees)	COORDINATE (Degrees)	COORDINATE (Degrees)	COORDINATE (Degrees)
APC	2000001:00:05	37.86	91.17	121.57	3	1479	486	965	1529
APC	2000001:00:07	39.50	91.17	121.69	3	1787	869	1195	1727
APC	2000001:00:09	42.00	91.17	125.63	3	1911	944	1333	1906
APC	2000001:00:11	44.50	91.17	127.76	3	2059	983	1439	2038
APC	2000001:00:13	47.00	91.17	129.84	3	2234	1062	1528	2225
APC	2000001:00:15	49.50	91.17	131.91	3	2538	1253	1734	2516
APC	2000001:00:17	52.00	91.17	133.80	3	2748	1282	1886	2641
APC	2000001:00:19	54.50	91.17	135.85	4	2864	1357	2113	2746
APC	2000001:00:21	57.00	91.17	137.88	4	3152	1281	2275	3061
APC	2000001:00:23	59.50	91.17	139.78	4	3403	1436	2395	3383
APC	2000001:00:25	62.00	91.17	141.68	4	3628	1509	2716	3699
APC	2000001:00:27	64.50	91.17	143.64	4	4401	2425	3367	4408
APC	2000001:00:29	67.00	91.17	145.57	4	4627	2561	3595	4730
APC	2000001:00:31	69.50	91.17	147.23	4	5094	1968	3483	4737
APC	2000001:00:33	72.00	91.17	149.07	4	5376	2386	3872	4967
APC	2000001:00:35	74.50	91.17	150.86	4	5534	2180	4087	5153
APC	2000001:00:37	77.00	91.17	152.35	4	5576	3076	4877	5399
APC	2000001:00:39	79.50	91.17	154.06	4	5959	3362	3976	5391
APC	2000001:00:41	82.00	91.17	155.55	4	6354	2915	3963	5428
APC	2000001:00:43	84.50	91.17	157.01	4	6106	1315	2163	4738
APC	2000001:00:45	87.00	91.17	158.27	4	4919	2974	3391	4735
APC	2000001:00:47	89.50	91.17	159.41	3	4367	1551	2568	4642
APC	2000001:00:49	92.00	91.17	160.68	3	4308	1439	2896	4549
APC	2000001:00:51	94.50	91.17	162.31	3	4344	1764	3395	4834
APC	2000001:00:53	97.00	91.17	163.27	3	4696	1787	3481	4671
APC	2000001:00:55	99.50	91.17	164.72	3	4472	1467	3437	4472
APC	2000001:00:57	102.00	91.17	165.82	3	4463	1496	3481	4648
APC	2000001:00:59	104.50	91.17	167.23	3	4725	1496	3406	4765
APC	2000001:01:01	107.00	91.17	168.11	3	5026	1772	3778	4981
APC	2000001:01:03	109.50	91.17	169.15	3	5214	1849	4026	5161
APC	2000001:01:05	112.00	91.17	170.05	3	5261	2516	3886	5399
APC	2000001:01:07	114.50	91.17	171.03	3	5155	2578	3777	5548
APC	2000001:01:09	117.00	91.17	172.22	3	5134	1487	3621	5343
APC	2000001:01:11	119.50	91.17	173.36	3	5176	1396	3875	5281
APC	2000001:01:13	122.00	91.17	174.50	3	5176	1396	3875	5281
APC	2000001:01:15	124.50	91.17	175.63	3	5176	1396	3875	5281
APC	2000001:01:17	127.00	91.17	176.76	3	5176	1396	3875	5281
APC	2000001:01:19	129.50	91.17	177.89	3	5176	1396	3875	5281
APC	2000001:01:21	132.00	91.17	179.02	3	5176	1396	3875	5281
APC	2000001:01:23	134.50	91.17	180.15	3	5176	1396	3875	5281
APC	2000001:01:25	137.00	91.17	181.28	3	5176	1396	3875	5281
APC	2000001:01:27	139.50	91.17	182.41	3	5176	1396	3875	5281
APC	2000001:01:29	142.00	91.17	183.54	3	5176	1396	3875	5281
APC	2000001:01:31	144.50	91.17	184.67	3	5176	1396	3875	5281
APC	2000001:01:33	147.00	91.17	185.80	3	5176	1396	3875	5281
APC	2000001:01:35	149.50	91.17	186.93	3	5176	1396	3875	5281
APC	2000001:01:37	152.00	91.17	188.06	3	5176	1396	3875	5281
APC	2000001:01:39	154.50	91.17	189.19	3	5176	1396	3875	5281
APC	2000001:01:41	157.00	91.17	190.32	3	5176	1396	3875	5281
APC	2000001:01:43	159.50	91.17	191.45	3	5176	1396	3875	5281
APC	2000001:01:45	162.00	91.17	192.58	3	5176	1396	3875	5281
APC	2000001:01:47	164.50	91.17	193.71	3	5176	1396	3875	5281
APC	2000001:01:49	167.00	91.17	194.84	3	5176	1396	3875	5281
APC	2000001:01:51	169.50	91.17	195.97	3	5176	1396	3875	5281
APC	2000001:01:53	172.00	91.17	197.10	3	5176	1396	3875	5281
APC	2000001:01:55	174.50	91.17	198.23	3	5176	1396	3875	5281
APC	2000001:01:57	177.00	91.17	199.36	3	5176	1396	3875	5281
APC	2000001:01:59	179.50	91.17	200.49	3	5176	1396	3875	5281
APC	2000001:02:01	182.00	91.17	201.62	3	5176	1396	3875	5281
APC	2000001:02:03	184.50	91.17	202.75	3	5176	1396	3875	5281
APC	2000001:02:05	187.00	91.17	203.88	3	5176	1396	3875	5281
APC	2000001:02:07	189.50	91.17	205.01	3	5176	1396	3875	5281
APC	2000001:02:09	192.00	91.17	206.14	3	5176	1396	3875	5281
APC	2000001:02:11	194.50	91.17	207.27	3	5176	1396	3875	5281
APC	2000001:02:13	197.00	91.17	208.40	3	5176	1396	3875	5281
APC	2000001:02:15	199.50	91.17	209.53	3	5176	1396	3875	5281
APC	2000001:02:17	202.00	91.17	210.66	3	5176	1396	3875	5281
APC	2000001:02:19	204.50	91.17	211.79	3	5176	1396	3875	5281
APC	2000001:02:21	207.00	91.17	212.92	3	5176	1396	3875	5281
APC	2000001:02:23	209.50	91.17	214.05	3	5176	1396	3875	5281
APC	2000001:02:25	212.00	91.17	215.18	3	5176	1396	3875	5281
APC	2000001:02:27	214.50	91.17	216.31	3	5176	1396	3875	5281
APC	2000001:02:29	217.00	91.17	217.44	3	5176	1396	3875	5281
APC	2000001:02:31	219.50	91.17	218.57	3	5176	1396	3875	5281
APC	2000001:02:33	222.00	91.17	219.70	3	5176	1396	3875	5281
APC	2000001:02:35	224.50	91.17	220.83	3	5176	1396	3875	5281
APC	2000001:02:37	227.00	91.17	221.96	3	5176	1396	3875	5281
APC	2000001:02:39	229.50	91.17	223.09	3	5176	1396	3875	5281
APC	2000001:02:41	232.00	91.17	224.22	3	5176	1396	3875	5281
APC	2000001:02:43	234.50	91.17	225.35	3	5176	1396	3875	5281
APC	2000001:02:45	237.00	91.17	226.48	3	5176	1396	3875	5281
APC	2000001:02:47	239.50	91.17	227.61	3	5176	1396	3875	5281
APC	2000001:02:49	242.00	91.17	228.74	3	5176	1396	3875	5281
APC	2000001:02:51	244.50	91.17	229.87	3	5176	1396	3875	5281
APC	2000001:02:53	247.00	91.17	231.00	3	5176	1396	3875	5281
APC	2000001:02:55	249.50	91.17	232.13	3	5176	1396	3875	5281
APC	2000001:02:57	252.00	91.17	233.26	3	5176	1396	3875	5281
APC	2000001:02:59	254.50	91.17	234.39	3	5176	1396	3875	5281
APC	2000001:03:01	257.00	91.17	235.52	3	5176	1396	3875	5281
APC	2000001:03:03	259.50	91.17	236.65	3	5176	1396	3875	5281
APC	2000001:03:05	262.00	91.17	237.78	3	5176	1396	3875	5281
APC	2000001:03:07	264.50	91.17	238.91	3	5176	1396	3875	5281
APC	2000001:03:09	267.00	91.17	240.04	3	5176	1396	3875	5281
APC	2000001:03:11	269.50	91.17	241.17	3	5176	1396	3875	5281
APC	2000001:03:13	272.00	91.17	242.30	3	5176	1396	3875	5281
APC	2000001:03:15	274.50	91.17	243.43	3	5176	1396	3875	5281
APC	2000001:03:17	277.00	91.17	244.56	3	5176	1396	3875	5281
APC	2000001:03:19	279.50	91.17	245.69	3	5176	1396	3875	5281
APC	2000001:03:21	282.00	91.17	246.82	3	5176	1396	3875	5281
APC	2000001:03:23	284.50	91.17	247.95	3	5176	1396	3875	5281
APC	2000001:03:25	287.00	91.17	249.08	3	5176	1396	3875	5281
APC	2000001:03:27	289.50	91.17	250.21	3	5176	1396	3875	5281
APC	2000001:03:29	292.00	91.17	251.34	3	5176	1396	3875	5281
APC	2000001:03:31	294.50	91.17	252.47	3	5176	1396	3875	5281
APC	2000001:03:33	297.00	91.17	253.60	3	5176	1396	3875	5281
APC	2000001:03:35	299.50	91.17	254.73	3	5176	1396	3875	5281
APC	2000001:03:37	302.00	91.17	255.86	3	5176	1396	3875	5281
APC	2000001:03:39	304.50	91.17	256.99	3	5176	1396	3875	5281
APC	2000001:03:41	307.00	91.17	258.12	3	5176	1396	3875	5281
APC	2000001:03:43	309.50	91.17	259.25	3	5176	1396	3875	5281
APC	2000001:03:45	312.00	91.17	260.38	3	5176	1396	3875	5281
APC	2000001:03:47	314.50	91.17	261.51	3	5176	1396	3875	5281
APC	2000001:03:49	317.00	91.17	262.64	3	5176	1396	3875	5281
APC	2000001:03:51	319.50	91.17	263.77	3	5176	1396	3875	5281
APC	2000001:03:53	322.00	91.17	264.90	3	5176	1396	3875	5281
APC	2000001:03:55								

[illegible]

D95

SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	DOA	WATERBAND - VISIBLE										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS										KINETICS									
------	------	----------------------	------------------------	-----	---------------------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--	----------	--	--	--	--	--	--	--	--	--

WAVEBAND : VISIBLE													
TIME	ALTITUDE (Degrees)	ELEVATION (Degrees)	BOA (Degrees)	REFLECTANCE (Digital Value)	MINIMUM (Digital Value)	DEVIATION (Digital Value)	REBOUND (Digital Value)	MODE (Digital Value)	TECH (Digital Value)	MAXIMUM (Digital Value)	RMG (Digital Value)	ENTROPY (Information Units)	EXPANSION (Information Units)
FTD 11JAN91:07:02	30.50	90.75	135.47	4	2427	970	1345	2116	4565	5008	3220	922	7.90
FTD 11JAN91:07:05	33.00	90.75	137.15	4	2605	956	1338	2360	4817	5417	3479	1037	7.87
FTD 11JAN91:07:09	35.50	90.75	138.79	4	4429	1758	2251	4406	6296	5877	3626	957	7.99
FTD 11JAN91:07:12	38.00	90.75	140.37	4	4464	2509	3161	4203	4028	6278	3364	1117	8.00
FTD 11JAN91:07:15	40.50	90.75	141.71	4	3952	2368	3101	3974	3972	4797	3629	1096	7.95
FTD 11JAN91:07:18	43.00	90.75	143.23	4	3229	1794	2104	3301	3716	4649	3552	2545	7.94
FTD 11JAN91:07:22	45.50	90.75	144.66	4	2471	1546	1886	2393	2374	3337	4576	1451	7.91
FTD 11JAN91:07:25	48.00	90.75	146.04	4	2162	1317	1714	2174	2084	2556	2830	842	6.92
FTD 11JAN91:07:28	50.50	90.75	147.12	4	2054	1481	1720	2011	1936	2640	2865	740	6.76
FTD 11JAN91:07:31	53.00	90.75	148.34	4	2048	1373	1695	2030	1924	2438	2724	743	6.81
FTD 11JAN91:07:34	55.50	90.75	149.63	3	5358	2348	3643	5206	5378	2399	2876	657	6.59
FTD 11JAN91:08:04	23.00	90.75	107.43	3	5084	2642	3731	5392	5212	9213	9798	5482	1686
FTD 11JAN91:08:19	25.50	90.75	109.04	3	6200	2581	4425	5576	5625	9605	13904	3180	1670
FTD 11JAN91:08:52	28.00	90.75	112.03	3	5758	1823	3372	5303	5451	9870	12538	4498	1924
FTD 11JAN91:09:03	30.50	90.75	113.36	3	5492	1758	3136	5227	5530	10198	10936	7062	1929
FTD 11JAN91:09:05	33.00	90.75	114.88	3	5637	2379	3624	5276	5182	10564	11578	6920	1849
FTD 11JAN91:09:08	35.50	90.75	116.14	3	4805	2021	3141	4802	5106	6091	10344	6950	1066
FTD 11JAN91:09:11	38.00	90.75	117.36	3	4555	1945	2937	4606	4352	5771	7444	3034	904
FTD 11JAN91:09:13	40.50	90.75	118.53	3	4745	2200	3239	4750	4216	6212	7635	2973	907
FTD 11JAN91:09:16	43.00	90.75	119.88	3	4784	2268	3315	4768	4839	6257	7471	2942	903
FTD 11JAN91:09:19	45.50	90.75	120.96	3	4904	2320	3514	4942	4978	6190	7513	2876	825
FTD 11JAN91:09:22	48.00	90.75	121.98	3	4736	2320	3407	4757	4782	6009	7753	2802	795
FTD 11JAN91:09:25	50.50	90.75	123.19	3	4611	2075	3094	4627	4003	6095	8023	3001	910
FTD 11JAN91:09:28	53.00	90.75	124.11	3	6564	2120	3256	4558	4505	5922	7993	2666	813
FTD 11JAN91:10:09	23.00	90.75	85.28	2	3970	1651	2497	3331	2881	6488	8315	3991	1375
FTD 11JAN91:10:52	25.50	90.75	86.24	2	5974	3018	3610	6248	6486	7868	14559	4258	1235
FTD 11JAN91:10:55	28.00	90.75	87.35	2	4767	2231	2865	4411	2998	7604	8191	4739	1595
FTD 11JAN91:10:57	30.50	90.75	88.26	2	5113	1718	2339	5129	3136	7966	8560	5127	1592
FTD 11JAN91:11:00	33.00	90.75	89.32	2	4211	1211	2210	3807	2935	7275	6618	5085	1612
FTD 11JAN91:11:03	35.50	90.75	90.18	3	5635	2556	3273	5753	5780	7698	8663	4225	1248
FTD 11JAN91:11:05	38.00	90.75	91.00	3	6243	2784	3807	6332	6905	7839	10785	3452	1038
FTD 11JAN91:11:08	40.50	90.75	91.99	3	5413	2340	3285	5382	6054	7764	9314	4479	1391
FTD 11JAN91:11:10	43.00	90.75	92.76	3	3932	1799	2701	3465	3359	6032	9130	3331	1040
FTD 11JAN91:11:13	45.50	90.75	93.50	3	3997	2020	2556	3065	3022	6026	8270	3470	1088
FTD 11JAN91:11:16	48.00	90.75	94.41	3	2939	1510	2036	2571	2651	5308	7116	3272	1002
FTD 11JAN91:11:18	50.50	90.75	95.09	3	2387	1323	1922	2340	2208	2988	5431	1066	343
													7.17
													1.07
													3.0
													-180
													-446
													-180
													-31
													-46
													46
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
													840
													302
					</								

UNIVERBAND : VISIBLE																								
SITE	TIME	AZIMUTH (Degrees)	ELEVATION (Degrees)	BOA	REAL (Digital Value)	MINIMUM (Digital Value)	PERC 05 (Digital Value)	MEDIAN (Digital Value)	MODE (Digital Value)	PERC 95 (Digital Value)	MAXIMUM (Digital Value)	RNO 90 (Digital Value)	8 (Digital Value)	ENTROPY (Information)	SKETCHES (Information)	KURTOSIS (Information)	CNT MIN (Digital Value)	CNT 05 (Digital Value)	CNT 25 (Digital Value)	CNT 50 (Digital Value)	CNT 75 (Digital Value)	CNT 95 (Digital Value)	CNT MAX (Digital Value)	
TPG	13SEP00:12:36	200.00	91.33	116.13	3	6261	2531	6298	6392	7838	11062	3319	908	16.34	-0.20	1.0	-1393	-563	-191	2	199	658	1346	
TPG	13SEP00:12:40	202.83	91.33	116.03	3	6301	2534	6300	6308	8034	11278	3420	1011	16.38	0.34	1.6	-1314	-583	-195	2	203	653	1324	
TPG	13SEP00:12:45	235.33	92.33	106.30	3	5276	2143	5639	5282	4978	6640	3201	963	16.30	-0.40	2.4	-1823	-623	-216	-4	189	623	1023	
TPG	13SEP00:14:38	190.00	91.33	118.22	3	5833	2151	6181	5882	6030	7864	3203	940	16.26	-0.26	0.2	-1343	-444	-152	-2	173	699	1151	
TPG	13SEP00:14:44	192.50	91.33	119.28	3	5753	1804	6125	5792	6024	7824	3199	943	16.28	-0.28	0.1	-1241	-519	-191	-23	161	563	1370	
TPG	13SEP00:14:59	195.00	91.33	120.40	3	6214	2333	6352	6274	6034	7867	3615	1199	16.57	-0.24	-0.5	-1239	-512	-186	-4	174	570	1303	
TPG	13SEP00:15:06	197.50	91.33	121.57	3	5734	1546	6078	5807	6000	7208	3129	917	16.21	-0.47	0.5	-1123	-542	-197	-6	184	591	1299	
TPG	13SEP00:15:08	200.00	91.33	122.80	3	5779	2438	6146	5831	6048	7303	3158	944	16.26	-0.13	0.7	-1084	-514	-189	-4	174	593	1241	
TPG	13SEP00:15:15	202.83	91.33	124.27	3	5681	2580	6256	5867	5696	7656	3199	975	16.31	0.25	0.7	-1095	-503	-182	-2	184	594	1271	
TPG	13SEP00:15:15	235.33	92.33	134.86	3	4657	827	3165	4843	6079	15345	2914	896	16.17	0.44	3.6	-1131	-546	-206	-13	173	546	1131	
TPG	13SEP00:16:00	157.00	91.33	86.48	2	4698	1609	3150	4769	4802	6000	2850	846	16.08	-0.58	0.4	-1009	-465	-169	8	182	465	1009	
TPG	13SEP00:16:03	159.50	91.33	87.95	2	4594	1748	3311	4596	4674	5894	2573	784	13.95	-0.11	0.3	-1311	-484	-178	0	180	484	1311	
TPG	13SEP00:16:07	162.00	91.33	89.4	2	4493	1618	3159	4523	4659	5728	2569	780	13.94	-0.30	0.5	-1052	-465	-167	0	169	465	1052	
TPG	13SEP00:16:11	164.50	91.33	91.01	3	4415	1637	3144	4412	4359	5603	2456	737	13.83	-0.28	0.3	-1056	-459	-159	-2	143	459	1056	
TPG	13SEP00:16:15	167.00	91.33	92.72	3	4305	1493	2994	4363	4526	5426	2432	746	13.84	-0.35	0.3	-1054	-426	-173	-4	132	426	1054	
TPG	13SEP00:16:23	172.00	91.33	93.32	3	4289	1299	3000	4361	4546	7809	2546	800	13.96	-0.44	0.8	-1127	-480	-188	-9	165	480	1127	
TPG	13SEP00:16:26	190.00	91.33	111.05	3	4500	1644	3186	4508	4326	5768	2582	783	13.94	-0.10	-0.5	-906	-433	-154	0	158	437	1043	
TPG	13SEP00:16:30	192.50	91.33	112.82	3	6317	1376	3161	4545	4399	5788	2725	792	13.96	-0.26	-0.4	-1061	-478	-178	-5	156	512	1166	
TPG	13SEP00:16:34	195.00	91.33	114.62	3	4506	1787	3270	4508	4811	5691	2621	726	13.90	-0.21	0.2	-998	-444	-165	-2	154	465	1031	
TPG	13SEP00:16:38	197.50	91.33	116.52	3	4397	1488	3090	4406	4380	5629	2539	745	13.84	-0.19	0.3	-887	-452	-176	-2	159	503	1103	
TPG	13SEP00:16:42	200.00	91.33	118.34	3	4450	1903	3152	4470	4704	5724	2573	765	13.88	0.10	0.6	-833	-439	-174	-8	158	491	1095	
TPG	13SEP00:16:46	202.83	91.33	120.51	3	4464	1866	3156	4461	4399	5841	2685	790	13.94	0.22	0.6	-861	-426	-173	-9	167	497	999	
TPG	13SEP00:16:49	235.33	92.33	145.33	4	3825	1907	2788	3803	3864	6158	2220	682	13.67	0.43	-0.8	-969	-439	-173	-4	152	439	969	
TPG	13SEP00:17:45	157.00	91.33	70.40	2	2810	915	1738	2856	2964	3741	2003	603	13.44	-0.57	-0.1	-765	-369	-128	6	137	369	765	
TPG	13SEP00:17:47	159.50	91.33	72.40	2	2371	876	1618	2373	2591	4871	1892	567	13.35	0.02	-0.6	-836	-377	-137	2	137	377	836	
TPG	13SEP00:17:50	162.00	91.33	74.56	2	2350	840	1290	2374	2406	4384	1959	555	13.26	-0.25	-0.2	-954	-353	-122	2	120	353	954	
TPG	13SEP00:17:53	164.50	91.33	76.59	2	2195	696	1263	2190	2228	3139	1896	550	13.25	0.13	-0.6	-904	-358	-118	2	113	358	904	
TPG	13SEP00:17:55	167.00	91.33	78.63	2	2062	774	1054	2113	2224	2966	1913	564	13.23	-0.11	-0.6	-821	-353	-122	6	122	353	821	
TPG	13SEP00:17:58	169.50	91.33	80.82	2	2018	744	1174	2029	2019	2839	1665	499	13.07	-0.02	-0.3	-748	-317	-113	4	114	317	748	
TPG	13SEP00:18:01	172.00	91.33	82.88	2	1899	634	1089	1924	1993	2702	1693	494	13.01	-0.13	-0.8	-656	-304	-101	0	99	304	656	
TPG	13SEP00:18:03	190.00	91.33	100.27	3	1997	748	1346	1995	1926	2651	1305	424	12.69	0.04	-1.0	-579	-248	-86	6	94	251	594	
TPG	13SEP00:18:06	192.50	91.33	102.37	3	1925	671	1286	1939	1963	2535	1378	1249	388	12.61	-0.25	-1.2	-531	-263	-94	0	88	248	540
TPG	13SEP00:18:09	195.00	91.33	104.59	3	1812	713	1251	1813	1669	2383	1133	343	12.41	-0.03	-0.8	-473	-223	-83	2	88	229	471	
TPG	13SEP00:18:11	197.50	91.33	106.70	3	1682	639	1153	1667	1543	2254	1101	333	12.34	0.16	-0.6	-441	-229	-83	2	84	225	469	
TPG	13SEP00:18:14	200.00	91.33	108.81	3	1556	658	1069	1581	1523	2132	1063	318	12.26	0.16	-0.7	-407	-201	-79	-2	79	212	431	
TPG	13SEP00:18:17	202.83	91.33	111.38	3	1490	613	998	1433	1433	2010	1013	312	12.20	0.55	2.1	-1011	-178	-71	0	73	197	401	

SITE	YPC 13SEP02:18:19	235.33	92.33	143.02	4	1058	566	756	1020	990	1506	2014	750	229	11.51	1.39	0.3	-369	-369	158	-51	0	54	158	369
TIME																									
AZIMUTH	(Degrees)																								
ELEVATION	(Degrees)																								
SLDR	(Degrees)																								
BOA																									
MEAN	(Digital value)																								
MINIMUM	(Digital value)																								
PERC_05	(Digital value)																								
PERC_05	(Digital value)																								
MEDIAN	(Digital value)																								
MODE	(Digital value)																								
PERC_95	(Digital value)																								
MAXIMUM	(Digital value)																								
RMS_90	(Digital value)																								
ENTROPY	(Digital value)																								
ENTROPY	(Elements/element)																								
SKETCHES	(Elements/element)																								
SKETCHES	(Elements/element)																								
CNT_MIN	(Digital value)																								
CNT_05	(Digital value)																								
CNT_25	(Digital value)																								
CNT_50	(Digital value)																								
CNT_75	(Digital value)																								
CNT_95	(Digital value)																								
CNT_MAX	(Digital value)																								

Appendix E

Listing of PC-Based Program for Predicting Metric Class Values

CCV.C 1 OF 5

```
#include <stdio.h>
#include <fcntl.h>
#include <string.h>
#include "readline.c"
```

CCVALLO 4

CCV.C 2 OF 5

```
MODE7:
printf("MODE #7\n");
if(veget <= 9.6500000000E+01) goto MODE8;
else goto TMODE8;

MODE8:
printf("MODE #8\n");
if(solar <= 4.4600000000E+02) goto TMODE5;
else goto MODE9;

MODE9:
printf("MODE #9\n");
if(railhum <= 6.6500000000E+01) goto TMODE6;
else goto TMODE7;

MODE10:
printf("MODE #10\n");
if(railhum <= 4.0500000000E+01) goto MODE11;
else goto MODE12;

MODE11:
printf("MODE #11\n");
if(railhum <= 3.5500000000E+01) goto TMODE9;
else goto TMODE10;

MODE12:
printf("MODE #12\n");
if(veget <= 7.9600000000E+01) goto MODE13;
else goto MODE16;

MODE13:
printf("MODE #13\n");
if(veget <= 7.7600000000E+01) goto MODE14;
else goto MODE15;

MODE14:
printf("MODE #14\n");
if(airtemp <= 2.6800000000E+01) goto TMODE11;
else goto TMODE12;

MODE15:
printf("MODE #15\n");
if(airtemp <= 2.5200000000E+01) goto TMODE13;
else goto TMODE14;

MODE16:
printf("MODE #16\n");
if(veget <= 9.7000000000E+01) goto MODE17;
else goto TMODE20;

MODE17:
printf("MODE #17\n");
if(railhum <= 4.5500000000E+01) goto TMODE15;
else goto MODE18;

MODE18:
printf("MODE #18\n");
if(railhum <= 5.7500000000E+01) goto TMODE16;
else goto MODE19;
```

CCVALL04

CCV.C 3 OF 5

```

MODE19:
printf("MODE #19\n");
if(veget <= 8.3500000000E+01) goto MODE20;
else goto TMODE19;

MODE20:
printf("MODE #20\n");
if(veget <= 8.1000000000E+01) goto TMODE17;
else goto TMODE18;

MODE21:
printf("MODE #21\n");
if(veget <= 8.0200000000E+01) goto MODE22;
else goto NUDE27;

MODE22:
printf("MODE #22\n");
if(aolar <= 8.7100000000E+02) goto MODE23;
else goto MODE26;

MODE23:
printf("MODE #23\n");
if(reihum <= 1.7500000000E+01) goto TMODE21;
else goto MODE24;

MODE24:
printf("MODE #24\n");
if(veget <= 4.0500000000E+01) goto TMODE23;
else goto MODE25;

MODE25:
printf("MODE #25\n");
if(veget <= 7.9500000000E+01) goto TMODE23;
else goto TMODE24;

MODE26:
printf("MODE #26\n");
if(veget <= 7.6300000000E+01) goto TMODE25;
else goto TMODE26;

MODE27:
printf("MODE #27\n");
if(airtemp <= 3.4500000000E+01) goto MODE28;
else goto TMODE32;

MODE28:
printf("MODE #28\n");
if(veget <= 8.7800000000E+01) goto MODE29;
else goto MODE31;

MODE29:
printf("MODE #29\n");
if(reihum <= 4.2500000000E+01) goto MODE30;
else goto TMODE29;

MODE30:
printf("MODE #30\n");
if(veget <= 8.5500000000E+01) goto TMODE27;
else goto TMODE28;

```

CCVALLO4
CCV.C 4 OF 5

```

TNODE31:
printf("TNODE #31\n");
if(solar <= 1.85000000000E+02) goto TNODE30;
else goto TNODE31;

TNODE1:
TNODE3:
TNODE4:
TNODE6:
TNODE8:
TNODE9:
TNODE28:
TNODE29:
TNODE30:
TNODE32:
printf("\n\n");
printf("Class #1\n");
goto END;

TNODE2:
TNODE5:
TNODE16:
TNODE20:
TNODE21:
TNODE23:
TNODE26:
TNODE27:
TNODE31:
printf("\n\n");
printf("Class #2\n");
goto END;

TNODE7:
TNODE11:
TNODE14:
TNODE15:
TNODE17:
TNODE19:
TNODE22:
TNODE24:
TNODE25:
printf("\n\n");
printf("Class #3\n");
goto END;

TNODE10:
TNODE12:
TNODE13:
TNODE18:
printf("\n\n");
printf("Class #4\n");
goto END;

END:
return(0);
}

int main(num,list)
```

CCVALLO4

CCV.C 5 OF 5

```
int num;
char list[1];

{
    char n[20];
    char s[20];

    itoa(num,n,10);
    strcpy(s,"");
    strcat(s,n);
    strcat(s,"");
    if (strlen(strcat(list,s)) > 0)
        return(1);
    else
        return(0);
}
```


CST.C 1 OF 8

```

NODE1:
printf("NODE #1\n");
if(veget <= 9.31000000000E+01) goto NODE2;
else goto NODE57;

NODE2:
printf("NODE #2\n");
if(ar40 <= 5.47000000000E+02) goto NODE3;

```

CSTALLO4

CST.C 2 OF 8

else goto NODE48;

```
NODE3:
printf("MODE #3\n");
if(winddir <= 2.6100000000E+02) goto NODE4;
else goto NODE29;
```

```
NODE4:
printf("MODE #4\n");
if(rhldum <= 9.3500000000E+01) goto NODE5;
else goto NODE24;
```

```
NODE5:
printf("MODE #5\n");
if(windspd <= 1.7500000000E+00) goto NODE6;
else goto NODE15;
```

```
NODE6:
printf("MODE #6\n");
if(winddir <= 1.2500000000E+02) goto NODE7;
else goto NODE13;
```

```
NODE7:
printf("MODE #7\n");
if(solar <= 5.6800000000E+02) goto NODE8;
else goto TNODE7;
```

```
NODE8:
printf("MODE #8\n");
if(winddir <= 4.6500000000E+01) goto NODE9;
else goto NODE10;
```

```
NODE9:
printf("MODE #9\n");
if(solar <= 1.3100000000E+01) goto TNODE1;
else goto TNODE2;
```

```
NODE10:
printf("MODE #10\n");
if(rhldum <= 6.1500000000E+01) goto NODE11;
else goto TNODE6;
```

```
NODE11:
printf("MODE #11\n");
if(rhldum <= 3.9500000000E+01) goto TNODE3;
else goto NODE12;
```

```
NODE12:
printf("MODE #12\n");
if(veget <= 8.0000000000E+01) goto TNODE4;
else goto TNODE5;
```

```
NODE13:
printf("MODE #13\n");
if(solar <= 3.7600000000E+01) goto NODE14;
else goto TNODE10;
```

```
NODE14:
printf("MODE #14\n");
if(airtemp <= 5.7000000000E+00) goto TNODE8;
```

```
else goto TMODE9;

MODE15:
printf("MODE #15\n");
if(ar120 <= 8.000000000E+00) goto MODE16;
else goto MODE19;

MODE16:
printf("MODE #16\n");
if(range <= 5.550000000E+02) goto MODE17;
else goto MODE18;

MODE17:
printf("MODE #17\n");
if(airtemp <= 6.950000000E+00) goto TMODE11;
else goto TMODE12;

MODE18:
printf("MODE #18\n");
if(reihum <= 5.500000000E+01) goto TMODE13;
else goto TMODE14;

MODE19:
printf("MODE #19\n");
if(winddir <= 2.130000000E+02) goto MODE20;
else goto MODE23;

MODE20:
printf("MODE #20\n");
if(ar60 <= 4.110000000E+02) goto TMODE15;
else goto TMODE21;

MODE21:
printf("MODE #21\n");
if(windspd <= 5.100000000E+00) goto MODE22;
else goto TMODE18;

MODE22:
printf("MODE #22\n");
if(reihum <= 4.150000000E+01) goto TMODE16;
else goto TMODE17;

MODE23:
printf("MODE #23\n");
if(reihum <= 5.150000000E+01) goto TMODE19;
else goto TMODE20;

MODE24:
printf("MODE #24\n");
if(windspd <= 2.250000000E+00) goto MODE25;
else goto TMODE26;

MODE25:
printf("MODE #25\n");
if(uolar <= 3.550000000E+00) goto MODE26;
else goto MODE28;

MODE26:
printf("MODE #26\n");
if(reihum <= 9.450000000E+01) goto TMODE21;
```

```

else goto NODE27;

NODE27:
printf("MODE #27\n");
if((relhum <= 9.7500000000E+01) goto TMODE22;
else goto TMODE23;

NODE28:
printf("MODE #28\n");
if((winddir <= 6.3000000000E+01) goto TMODE24;
else goto TMODE25;

NODE29:
printf("MODE #29\n");
if((winddir <= 3.2000000000E+02) goto TMODE30;
else goto TMODE41;

NODE30:
printf("MODE #30\n");
if((ar60 <= 1.0000000000E+00) goto TMODE31;
else goto TMODE32;

NODE31:
printf("MODE #31\n");
if((range <= 3.0500000000E+02) goto TMODE27;
else goto TMODE28;

NODE32:
printf("MODE #32\n");
if((range <= 2.9500000000E+02) goto TMODE29;
else goto TMODE33;

NODE33:
printf("MODE #33\n");
if((airtemp <= 1.4400000000E+01) goto TMODE34;
else goto TMODE40;

NODE34:
printf("MODE #34\n");
if((ar120 <= 1.0700000000E+02) goto TMODE35;
else goto TMODE36;

NODE35:
printf("MODE #35\n");
if((winddir <= 2.7100000000E+02) goto TMODE30;
else goto TMODE36;

NODE36:
printf("MODE #36\n");
if((relhum <= 9.7500000000E+01) goto TMODE37;
else goto TMODE35;

NODE37:
printf("MODE #37\n");
if((ar60 <= 7.0000000000E+00) goto TMODE31;
else goto TMODE38;

NODE38:
printf("MODE #38\n");
if((ar60 <= 1.0500000000E+00) goto TMODE32;

```

```

else goto TNODE39;

TNODE39:
printf("NODE #39\n");
if((relhum <= 4.3500000000E+01) goto TNODE33;
else goto TNODE34;

TNODE40:
printf("NODE #40\n");
if((veget <= 8.9700000000E+01) goto TNODE37;
else goto TNODE38;

TNODE41:
printf("NODE #41\n");
if((windspd <= 2.1000000000E+00) goto TNODE42;
else goto TNODE43;

TNODE42:
printf("NODE #42\n");
if((airtemp <= 3.0000000000E+00) goto TNODE39;
else goto TNODE40;

TNODE43:
printf("NODE #43\n");
if((sr120 <= 4.0000000000E+00) goto TNODE41;
else goto TNODE44;

TNODE44:
printf("NODE #44\n");
if((relhum <= 5.8500000000E+01) goto TNODE42;
else goto TNODE45;

TNODE45:
printf("NODE #45\n");
if((relhum <= 6.3000000000E+01) goto TNODE43;
else goto TNODE46;

TNODE46:
printf("NODE #46\n");
if((windspd <= 4.3000000000E+00) goto TNODE44;
else goto TNODE47;

TNODE47:
printf("NODE #47\n");
if((veget <= 8.9400000000E+01) goto TNODE45;
else goto TNODE46;

TNODE48:
printf("NODE #48\n");
if((windspd <= 2.9000000000E+00) goto TNODE49;
else goto TNODE53;

TNODE49:
printf("NODE #49\n");
if((veget <= 8.2700000000E+01) goto TNODE50;
else goto TNODE51;

TNODE50:
printf("NODE #50\n");
if((airtemp <= 2.8700000000E+01) goto TNODE51;

```

```

else goto NODE52;

NODE51:
printf("NODE #51\n");
if(ar60 <= 7.6500000000E+02) goto TMODE47;
else goto TMODE48;

NODE52:
printf("NODE #52\n");
if(airtemp <= 3.0900000000E+01) goto TMODE49;
else goto TMODE50;

NODE53:
printf("NODE #53\n");
if(ar60 <= 7.4300000000E+02) goto NODE54;
else goto TMODE56;

NODE54:
printf("NODE #54\n");
if(ar60 <= 5.5200000000E+02) goto TMODE52;
else goto NODE55;

NODE55:
printf("NODE #55\n");
if(winddir <= 2.0000000000E+02) goto NODE56;
else goto TMODE55;

NODE56:
printf("NODE #56\n");
if(range <= 2.6500000000E+03) goto TMODE53;
else goto TMODE54;

NODE57:
printf("NODE #57\n");
if(range <= 3.2000000000E+02) goto NODE58;
else goto TMODE64;

NODE58:
printf("NODE #58\n");
if(winddir <= 1.3100000000E+02) goto NODE59;
else goto NODE60;

NODE59:
printf("NODE #59\n");
if(winddir <= 6.2500000000E+01) goto TMODE57;
else goto TMODE58;

NODE60:
printf("NODE #60\n");
if(ar30 <= 4.6000000000E+00) goto TMODE59;
else goto NODE61;

NODE61:
printf("NODE #61\n");
if(ar30 <= 9.9100000000E+02) goto NODE62;
else goto TMODE63;

NODE62:
printf("NODE #62\n");
if(solar <= 3.9400000000E+02) goto NODE63;

```

else goto TNODE62;

CSTALLO4
CST.C 7 OF 8

TNODE63:
printf("TNODE #63\n");
if(solar <= 1.7700000000E+02) goto TNODE60;
else goto TNODE61;

TNODE12:
TNODE18:
TNODE20:
TNODE21:
TNODE23:
TNODE25:
TNODE28:
TNODE38:
TNODE41:
TNODE58:
TNODE61:
TNODE64:
printf("\n\n");
printf("Class #1\n");
goto END;

TNODE2:
TNODE3:
TNODE6:
TNODE10:
TNODE11:
TNODE14:
TNODE15:
TNODE17:
TNODE19:
TNODE24:
TNODE26:
TNODE29:
TNODE35:
TNODE42:
TNODE44:
TNODE46:
TNODE48:
TNODE57:
TNODE60:
TNODE62:
printf("\n\n");
printf("Class #2\n");
goto END;

TNODE1:
TNODE4:
TNODE7:
TNODE9:
TNODE13:
TNODE22:
TNODE27:
TNODE31:
TNODE34:
TNODE37:
TNODE40:
TNODE43:

CSTALLO4
CST.C 8 OF 8

```

TNODE45:
TNODE47:
TNODE49:
TNODE51:
TNODE54:
TNODE55:
TNODE59:
TNODE63:
printf("\n\n");
printf("Class #3\n");
goto END;

TNODE5:
TNODE8:
TNODE16:
TNODE30:
TNODE32:
TNODE33:
TNODE36:
TNODE39:
TNODE50:
TNODE52:
TNODE53:
TNODE56:
printf("\n\n");
printf("Class #4\n");
goto END;

END:
return(0);
)

int isin(num,list)
int num;
char list[];

(
char n[20];
char s[20];

itoa(num,n,10);
strcpy(s,".");
strcat(s,n);
strcat(s,".");
if (strlen(strstr(list,s)) > 0)
return(1);
else
return(0);
)

```


CCT.C 1 OF 7

```

MODE1:
printf("MODE #1\n");
if (relum == 6.750000000000E+01) goto MODE2;
else goto MODE2B;

MODE2:
printf("MODE #2\n");
if (pr30 == 4.820000000000E+02) goto MODE3;

```

CCTALLO4

CCT.C 2 OF 7

else goto NODE19;

```
NODE3:
printf("NODE #3\n");
if(range <= 3.9000000000E+02) goto NODE4;
else goto NODE7;
```

```
NODE4:
printf("NODE #4\n");
if(solar <= 3.0900000000E+02) goto NODE5;
else goto TNODE4;
```

```
NODE5:
printf("NODE #5\n");
if(veget <= 8.1500000000E+01) goto NODE6;
else goto TNODE3;
```

```
NODE6:
printf("NODE #6\n");
if(rhum <= 5.9500000000E+01) goto TNODE1;
else goto TNODE2;
```

```
NODE7:
printf("NODE #7\n");
if(windspd <= 2.3500000000E+00) goto NODE8;
else goto NODE14;
```

```
NODE8:
printf("NODE #8\n");
if(sr120 <= 1.0900000000E+02) goto NODE9;
else goto NODE11;
```

```
NODE9:
printf("NODE #9\n");
if(winddir <= 1.0300000000E+02) goto TNODE5;
else goto NODE10;
```

```
NODE10:
printf("NODE #10\n");
if(winddir <= 1.2400000000E+02) goto TNODE6;
else goto TNODE7;
```

```
NODE11:
printf("NODE #11\n");
if(airtemp <= 2.9000000000E+01) goto NODE12;
else goto NODE13;
```

```
NODE12:
printf("NODE #12\n");
if(winddir <= 2.9800000000E+02) goto TNODE8;
else goto TNODE9;
```

```
NODE13:
printf("NODE #13\n");
if(airtemp <= 3.1200000000E+01) goto TNODE10;
else goto TNODE11;
```

```
NODE14:
printf("NODE #14\n");
if(ar60 <= 3.6000000000E+02) goto NODE15;
```

```

else goto TMODE17;

MODE15:
printf("MODE #15\n");
if(veget <= 7.9300000000E+01) goto MODE16;
else goto TMODE16;

MODE16:
printf("MODE #16\n");
if(range <= 2.2500000000E+03) goto MODE17;
else goto TMODE15;

MODE17:
printf("MODE #17\n");
if(winddir <= 1.3900000000E+02) goto TMODE12;
else goto MODE18;

MODE18:
printf("MODE #18\n");
if(airtemp <= 9.6000000000E+00) goto TMODE13;
else goto TMODE14;

MODE19:
printf("MODE #19\n");
if(windspd <= 2.8500000000E+00) goto MODE20;
else goto MODE24;

MODE20:
printf("MODE #20\n");
if(veget <= 7.3100000000E+01) goto TMODE18;
else goto MODE21;

MODE21:
printf("MODE #21\n");
if(veget <= 8.3500000000E+01) goto MODE22;
else goto TMODE22;

MODE22:
printf("MODE #22\n");
if(airtemp <= 3.0900000000E+01) goto MODE23;
else goto TMODE21;

MODE23:
printf("MODE #23\n");
if(solar <= 5.6300000000E+02) goto TMODE19;
else goto TMODE20;

MODE24:
printf("MODE #24\n");
if(veget <= 9.3100000000E+01) goto MODE25;
else goto MODE27;

MODE25:
printf("MODE #25\n");
if(er60 <= 7.0500000000E+02) goto MODE26;
else goto TMODE25;

MODE26:
printf("MODE #26\n");
if(solar <= 7.0000000000E+02) goto TMODE23;

```

```

else goto TMODE24;

MODE27:
printf("MODE #27\n");
if(winddir <= 2.5200000000E+02) goto TMODE26;
else goto TMODE27;

MODE28:
printf("MODE #28\n");
if(veget <= 9.3100000000E+01) goto MODE29;
else goto MODE45;

MODE29:
printf("MODE #29\n");
if(sr120 <= 1.0000000000E+00) goto MODE30;
else goto MODE38;

MODE30:
printf("MODE #30\n");
if(windspd <= 5.0000000000E+00) goto MODE31;
else goto MODE34;

MODE31:
printf("MODE #31\n");
if(solar <= 3.5500000000E+00) goto MODE32;
else goto MODE33;

MODE32:
printf("MODE #32\n");
if(airtemp <= 6.7000000000E+00) goto TMODE28;
else goto TMODE29;

MODE33:
printf("MODE #33\n");
if(veget <= 7.5600000000E+01) goto TMODE30;
else goto TMODE31;

MODE34:
printf("MODE #34\n");
if(range <= 2.5500000000E+02) goto MODE35;
else goto MODE36;

MODE35:
printf("MODE #35\n");
if(windspd <= 2.0500000000E+00) goto TMODE32;
else goto TMODE33;

MODE36:
printf("MODE #36\n");
if(winddir <= 5.5500000000E+01) goto TMODE34;
else goto MODE37;

MODE37:
printf("MODE #37\n");
if(veget <= 7.3100000000E+01) goto TMODE35;
else goto TMODE36;

MODE38:
printf("MODE #38\n");
if(range <= 4.1000000000E+02) goto MODE39;

```

```
else goto NODE43;

NODE39:
printf("MODE #39\n");
if(sar60 <= 1.8900000000E+02) goto TNODE37;
else goto TNODE38;

NODE40:
printf("MODE #40\n");
if(winddir <= 7.500000000E+01) goto TNODE39;
else goto TNODE41;

NODE41:
printf("MODE #41\n");
if(sar60 <= 1.0000000000E+00) goto TNODE40;
else goto TNODE42;

NODE42:
printf("MODE #42\n");
if(solar <= 1.0000000000E+00) goto TNODE43;
else goto TNODE44;

NODE43:
printf("MODE #43\n");
if(rhum <= 8.700000000E+01) goto TNODE44;
else goto TNODE43;

NODE44:
printf("MODE #44\n");
if(veget <= 8.150000000E+01) goto TNODE41;
else goto TNODE42;

NODE45:
printf("MODE #45\n");
if(range <= 2.550000000E+02) goto TNODE46;
else goto TNODE47;

NODE46:
printf("MODE #46\n");
if(windspd <= 9.000000000E+00) goto TNODE45;
else goto TNODE46;

NODE47:
printf("MODE #47\n");
if(winddir <= 3.500000000E+02) goto TNODE48;
else goto TNODE51;

NODE48:
printf("MODE #48\n");
if(veget <= 9.700000000E+01) goto TNODE49;
else goto TNODE50;

NODE49:
printf("MODE #49\n");
if(veget <= 9.530000000E+01) goto TNODE47;
else goto TNODE50;

NODE50:
printf("MODE #50\n");
if(winddir <= 1.520000000E+02) goto TNODE48;
```

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE November 1993	3. REPORT TYPE AND DATES COVERED Report 2 of a series		
4. TITLE AND SUBTITLE Environmental Characterization for Target Acquisition; Report 2, Analysis of Thermal and Visible Imagery		5. FUNDING NUMBERS PR AT40		
6. AUTHOR(S) Bruce Sabol Salvador Rivera, Jr.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Engineer Waterways Experiment Station Environmental Laboratory 3909 Halls Ferry Road Vicksburg, MS 39180-6199		8. PERFORMING ORGANIZATION REPORT NUMBER Technical Report EL-93-9		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Aviation Applied Technology Directorate Aviation Systems Command, Fort Eustis, VA 23604-5577 U.S. Army Corps of Engineers Washington, DC 20314-1000		10. SPONSORING/MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.		12b. DISTRIBUTION CODE		
13. ABSTRACT (Maximum 200 words) Automated/Aided Target Recognition (ATR) systems are being developed for current and next generation attack and reconnaissance helicopters. Part of the development cycle consists of testing and evaluation of these systems at field test facilities within the United States. Preliminary tests of ATR systems have demonstrated a high sensitivity to terrain and environmental conditions. Testers and analysts must therefore have an understanding of the relationship between system performance and terrain/environmental conditions to plan tests and interpret data. To develop an understanding of this relationship, the Environmental Characterization for Target Acquisition (ECTA) Program was initiated. As part of this program, visible and thermal infrared imagery, meteorological data, and terrain characterization data were systematically collected from six different U.S. sites for different times of year and times of day. This report describes analysis procedures for evaluating the relationships between the sites' ground-truth measurements and statistical characteristics of resulting imagery. Results of these analyses are presented and discussed.				
14. SUBJECT TERMS Automatic target recognition Decision trees Image metrics			15. NUMBER OF PAGES 325	
Terrain conditions Thermal infrared imagery Visible imagery			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	